



Antimicrobial Susceptibility Profile (July 2021 - June 2022)

Outpatient Only

NOTE: Data for July through December 2021 was recalculated according to updated CLSI criteria (M39-5th Ed, January 2022)

NOTE: Statistics include data from patients seen in the medical centers through the Emergency Department, Ambulatory and Clinics.

GRAM NEGATIVE SUSCEPTIBILITIES (Percent Susceptible)

| Cefazolin (urine) limited to <i>E. coli</i> , <i>K.pneumoniae</i> and <i>P.mirabilis</i> | <i>Achromobacter xylosoxidans</i> | | <i>Acin.baumannii</i> complex ^a | | <i>Citro. freundii</i> complex ^b | | <i>Citrobacter koserii</i> | | <i>Klebsiella (Ent) aerogenes</i> ^c | | <i>Ent. cloacae</i> complex ^d | | <i>Escherichia coli</i> | | <i>E. coli</i> (ESBL) | | <i>Klebsiella oxytoca</i> | | <i>Klebsiella pneumoniae</i> | | <i>Kleb pneumo</i> (ESBL) | | <i>Klebsiella variicola</i> | | <i>Morganella morganii</i> | | <i>Proteus hauseri</i> | | <i>Proteus mirabilis</i> | | <i>Providencia rettgeri</i> | | <i>Pseudo aeruginosa</i> | | <i>Serratia marcescens</i> | | | | | | |
|--|-----------------------------------|------------|--|------------|---|------------|----------------------------|------------|--|------------|--|------------|-------------------------|------------|-----------------------|------------|---------------------------|------------|------------------------------|------------|---------------------------|------------|-----------------------------|------------|----------------------------|------------|------------------------|------------|--------------------------|------------|-----------------------------|------------|--------------------------|------------|----------------------------|------------|---------|---------|--|--|--|
| | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | | | |
| | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | ESBL Rates | | | | | |
| Amikacin | 14 | 0 | | | 99 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | * | * | 100 | 100 | * | 100 | 100 | 100 | 100 | 100 | 100 | | | | |
| Ampicillin | | | | | | | | | | | | | 65 | 66 | | | | | | | | | | | | | | | | 94 | 91 | | | | | | | | | | |
| Ampicillin/Sulbactam | | | 99 | 99 | | | | | | | | | 89 | 89 | | | 96 | 94 | 94 | 93 | | | | 94 | 96 | 19 | 13 | * | * | 98 | 98 | * | 83 | | | | | | | | |
| Cefazolin (urine) | | | | | | | | | | | | | 97 | 97 | | | | | 99 | 99 | | | | | | | | | 99 | 98 | | | | | | | | | | | |
| Cefepime | 29 | 21 | 97 | 98 | 100 | 98 | 100 | 100 | 100 | 100 | 97 | 98 | 100 | 100 | | | 100 | 100 | 100 | 100 | | | | 100 | 100 | 100 | 100 | * | * | 100 | 100 | * | 100 | 98 | 98 | 100 | 99 | | | | |
| Ceftazidime | 88 | 85 | 97 | 99 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 98 | 97 | | | | | |
| Ceftriaxone | 0 | 6 | 83 | 88 | 87 | 85 | 98 | 98 | 93 | 89 | 81 | 80 | 99 | 99 | | | 100 | 100 | 100 | 100 | | | | 98 | 94 | 99 | 95 | * | * | 99 | 99 | * | 100 | | | 96 | 98 | | | | |
| Ciprofloxacin | 52 | 18 | 96 | 96 | 88 | 89 | 98 | 98 | 99 | 99 | 91 | 95 | 85 | 85 | 15 | 17 | 100 | 98 | 97 | 97 | | | 20 | 20 | 92 | 95 | 88 | 80 | * | * | 95 | 95 | * | 91 | 93 | 94 | 93 | 97 | | | |
| Ertapenem | | | | | 100 | 99 | 100 | 100 | 99 | 100 | 99 | 99 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | | 99 | 99 | 100 | 100 | 100 | 99 | * | * | 100 | 100 | * | 100 | | | 100 | 100 | | | |
| Gentamicin | 4 | 0 | 99 | 100 | 99 | 98 | 100 | 100 | 100 | 99 | 95 | 97 | 94 | 94 | 72 | 77 | 99 | 100 | 100 | 99 | | | 80 | 77 | 100 | 100 | 94 | 95 | * | * | 98 | 98 | * | 100 | 100 | 99 | 100 | 99 | | | |
| Imipenem | 97 | 97 | 99 | 100 | | | | | | | | | | | 100 | 100 | | | | | | | 100 | 100 | | | | | | | | | | 94 | 94 | | | | | | |
| Levofloxacin | 76 | 77 | 97 | 98 | 89 | 91 | 100 | 100 | 99 | 99 | 93 | 97 | 85 | 85 | 10 | 13 | 100 | 98 | 98 | 98 | | | 22 | 27 | 99 | 99 | 90 | 87 | * | * | 95 | 95 | * | 91 | | | 95 | 99 | | | |
| Nitrofurantoin (urine) | | | | | 99 | 100 | 99 | 100 | 45 | 58 | 81 | 85 | 99 | 100 | 98 | 98 | 100 | 100 | 77 | 76 | | | 57 | 46 | 92 | 98 | | | | | | | | | | | | | | | |
| Piperacillin/Tazobactam | 100 | 97 | 93 | 90 | 100 | 99 | 100 | 99 | 93 | 93 | 87 | 89 | 100 | 99 | 98 | 100 | 99 | 99 | 99 | 99 | | | 88 | 88 | 100 | 99 | 100 | 100 | * | * | 100 | 100 | * | 97 | | | | | | | |
| Tobramycin | 4 | 0 | 99 | 100 | 100 | 98 | 100 | 100 | 100 | 100 | 97 | 97 | 100 | 100 | 91 | 91 | 99 | 100 | 100 | 100 | | | 69 | 70 | 100 | 100 | 99 | 99 | * | * | 100 | 99 | * | 100 | 100 | 100 | 99 | 99 | | | |
| Trimeth-Sulfa | 84 | 92 | 93 | 98 | 85 | 87 | 100 | 99 | 99 | 99 | 85 | 86 | 83 | 83 | 45 | 47 | 96 | 94 | 94 | 95 | | | 21 | 23 | 94 | 98 | 90 | 88 | * | * | 90 | 90 | * | 94 | | | 100 | 100 | | | |
| Total Isolates | 31 | 36 | 74 | 85 | 79 | 85 | 232 | 226 | 171 | 171 | 191 | 259 | 7327 | 6525 | 750 | 646 | 80 | 86 | 1549 | 1329 | 111 | 105 | 85 | 84 | 118 | 165 | 21 | 28 | 733 | 772 | 22 | 34 | 898 | 1088 | 83 | 100 | | | | | |
| Total Urine Only | n/a | 10 | n/a | 23 | n/a | 66 | n/a | 179 | n/a | 123 | n/a | 117 | n/a | 6278 | n/a | 594 | n/a | 51 | n/a | 1166 | n/a | 78 | n/a | 71 | n/a | 81 | n/a | 17 | n/a | 593 | n/a | 16 | n/a | 289 | n/a | 30 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Percent susceptible calculations are based on total Sensitive and Resistant isolates only; # of urine isolates are indicated to show what portion of the total count is due to a urine collection.

n/a = not available

| <i>Stenotrophomonas maltophilia</i> | Jul-Dec | Jan-Jun |
|-------------------------------------|---------|---------|
| Levofloxacin | 92 | 83 |
| Trimethoprim/Sulfa | 100 | 95 |
| Ceftazidime * | n/a | 55 |
| Total Isolates | 39 | 80 |
| Total Urine Only | n/a | 16 |

* Ceftazidime resulted if Trimeth/Sulfa is Resistant

| <i>Haemophilus influenzae</i> | Jul-Dec | Jan-Jun |
|-------------------------------|---------|---------|
| Ampicillin | * | 81 |
| Azithromycin | * | 100 |
| Ceftriaxone | * | 97 |
| Cefuroxime | * | 100 |
| Meropenem | * | 100 |
| Moxifloxacin | * | 100 |
| Tetracycline | * | 96 |
| Total Isolates | 29 | 30 |
| Total Urine Only | n/a | 0 |

Asterisk (*) indicates no result available

Where isolates in both periods are >=30, the following apply:

Green indicates increase in susceptibility by >5%

Red indicates decrease in susceptibility by >5%

NOTE: Where total isolates is less than 30, the susceptibility percentage may not be clinically significant and are highlighted in **BLUE** on these tables.
Source: CLSI Document M39-5thEd, January 2022

FOOTNOTES:

a *Acinetobacter baumannii* complex includes *A.calcoaceus*, *A.baumannii*, *A.dijkshoorniae*, *A. lactucae*, *A.nosocomialis*, *A.pittii* and *A.seifertii*

b *Citrobacter freundii* complex includes *C.braaki*, *C.freundii*, *C.gillenii*, *C.murliniae*, *C.rodenticum*, *C.sedlakii* and *C.wekmenii*

c *Enterobacter aerogenes* has been renamed *Klebsiella aerogenes*

d *Enterobacter cloacae* complex includes *E.asburiae*, *E.cancerogenus*, *E.cloacae*, *E.dissolvens*, *E.hormaechei*, *E.kobei* and *E.nimipressuralis*



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GRAM POSITIVE SUSCEPTIBILITIES (Percent Susceptible)

| | <i>S. aureus</i> ³ complex ⁷ MSSA ⁴ | | <i>S. aureus</i> ³ complex ⁷ MRSA | | All <i>S. aureus</i> ³ complex ⁷ | | <i>Staph lugdunensis</i> ³ | | All other coag neg <i>Staph</i> sp. ³ | | <i>Enterococcus</i> Non-VRE ⁵ | | <i>Enterococcus faecalis</i> | | <i>Enterococcus faecium</i> | | <i>Enterococcus</i> VRE | | <i>Streptococcus agalactiae</i> | | <i>Streptococcus pneumoniae</i> | | <i>Streptococcus pyogenes</i> | | Viridans <i>Strep</i> group ⁸ | | |
|----------------------------|--|---------|---|---------|--|---------|---------------------------------------|---------|--|---------|--|---------|------------------------------|---------|-----------------------------|---------|-------------------------|---------|---------------------------------|---------|---------------------------------|---------|-------------------------------|---------|--|---------|--|
| | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | Jul-Dec | Jan-Jun | |
| | Ampicillin | | | | | | | | | | | | 98 | 97 | 100 | 100 | 45 | 34 | * | * | | | | | | | |
| Cefazolin | 100 | 100 | | | 68 | 70 | 91 | 88 | 60 | 57 | | | | | | | | | | | | | | | | | |
| Cefotaxime | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ceftriaxone | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ciprofloxacin (urine) | | | | | | | | | | | | 92 | 91 | 93 | 91 | 29 | 32 | * | * | | | | | | | | |
| Clindamycin ^{1,2} | 85 | 85 | 65 | 60 | 79 | 78 | 86 | 84 | 65 | 69 | | | | | | | | | | | | | | | | | |
| Daptomycin | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 99 | | | | | | | | | | | | | | | | | |
| Erythromycin | 76 | 76 | 27 | 27 | 61 | 61 | 88 | 88 | 43 | 47 | | | | | | | | | | | | | | | | | |
| Levofloxacin (urine) | | | | | | | | | | | | 92 | 91 | 93 | 92 | 32 | 35 | * | * | | | | | | | | |
| Linezolid | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | * | * | | | | | | | | | |
| Minocycline | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | | | | | | | | | | | | | | | | |
| Moxifloxacin | 96 | 96 | 60 | 56 | 86 | 85 | 100 | 94 | 82 | 85 | | | | | | | | | | | | * | * | | | | |
| Nitrofurantoin (urine) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 75 | 59 | * | * | | | | | | | | | |
| Oxacillin | 100 | 100 | | | | | 91 | 88 | 60 | 57 | | | | | | | | | | | | | | | | | |
| Penicillin | 41 | 40 | | | | | 52 | 55 | 25 | 22 | | | | | | | | | | | | | | | | | |
| Rifampin ³ | 100 | 100 | 100 | 99 | 100 | 100 | 100 | 100 | 99 | 99 | | | | | | | | | | | | | | | | | |
| Tetracycline ⁶ | 92 | 91 | 82 | 76 | 89 | 86 | 93 | 94 | 84 | 77 | 28 | 27 | 27 | 25 | 53 | 38 | * | * | | | | * | * | | | | |
| Trimeth-Sulfa | 97 | 96 | 59 | 58 | 85 | 85 | 100 | 98 | 77 | 77 | | | | | | | | | | | | | * | * | | | |
| Vancomycin | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 99 | 99 | 100 | 68 | 66 | * | * | 100 | 100 | * | * | 100 | 100 | n/a | 100 | |
| Total Isolates | 1650 | 1786 | 755 | 778 | 2410 | 2564 | 44 | 51 | 822 | 933 | 1001 | 1216 | 950 | 1135 | 40 | 58 | 22 | 25 | 102 | 130 | 14 | 11 | 671 | 539 | n/a | 106 | |
| Total Urine Only | n/a | 138 | n/a | 34 | n/a | 172 | n/a | 25 | n/a | 475 | n/a | 796 | n/a | 763 | n/a | 29 | n/a | 12 | n/a | 15 | n/a | 1 | n/a | 0 | n/a | 20 | |
| | | | MRSA Rate | 31% | 30% | | | | | | | | | | | | VRE Rate | 2% | 2% | | | | | | | | |

NOTE: Statistics include data from patients seen in the medical centers through the Emergency Department, Ambulatory and Clinics.

| <i>Streptococcus pneumoniae</i> | | | | | | | | |
|---------------------------------|---------------------------------|---------|-------------|---------------------------------|---------|------------|---------------------------------|---------|
| Cefotaxime | | | Ceftriaxone | | | Penicillin | | |
| MIC | # isolates <i>S. pneumoniae</i> | | MIC | # isolates <i>S. pneumoniae</i> | | MIC | # isolates <i>S. pneumoniae</i> | |
| | Jul-Dec | Jan-Jun | | Jul-Dec | Jan-Jun | | Jul-Dec | Jan-Jun |
| <=0.12 | * | * | <=0.12 | * | * | <=0.06 | * | * |
| 0.25 | * | * | 0.25 | * | * | 0.12 | * | * |
| 0.5 | * | * | 0.5 | * | * | 0.25 | * | * |
| 1 | * | * | 1 | * | * | 0.5 | * | * |
| 2 | * | * | 2 | * | * | 1 | * | * |
| >=4 | * | * | >=4 | * | * | 2 | * | * |
| | | | | | | 4 | * | * |
| | | | | | | >=8 | * | * |

S. pneumoniae interpretive guidelines

| Penicillin | | |
|-----------------------------------|----------|----------|
| Parenteral non-meningitis | | |
| <=2 S | 4 I | >=8 R |
| Parenteral meningitis | | |
| <=0.06 S | ---- | >=0.12 R |
| Oral | | |
| <=0.06 S | 0.12-1 I | >=2 R |
| Cefotaxime and Ceftriaxone | | |
| Non-meningitis | | |
| <=1 S | 2 I | >=4 R |
| Meningitis | | |
| <=0.5 S | 1 I | >=2 R |

Percent susceptible calculations are based on total Sensitive and Resistant isolates only; # of urine isolates are indicated to show what portion of the total count is due to a urine collection.

FOOTNOTES:

- ¹ Clindamycin & Erythromycin are not appropriate for urine sources
- ² Erythromycin is not appropriate for pregnant women
- ³ Rifampin should not be used alone for treatment of *Staph* infections
- ⁴ *Staph aureus* (MSSA) isolates that show Penicillin susceptibility may harbor the blaZ gene that produces beta-lactamase.
- ⁵ Non-VRE includes intrinsically resistant *Enterococcus* (*E. casseliflavus* & *E. gallinarum*)
- ⁶ For urine only with isolates of *Enterococcus*
- ⁷ *Staph aureus* complex includes *Staph aureus*, *Staph argenteus* and *Staph schweitzeri*
- ⁸ Viridans *Strep* group includes *S. anginosus* group, *S. bovis* group, *S. mitis* group, *S. mutans* group, *S. salivarius* group and *S. sanguinis* group

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