

Antibiogram (in % nonsusceptible) for six selected bacterial isolates from private hospitals by in- and out-patient setting for year 2014-2017

Antibiogram for in-patient setting

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------------------------|-------------|-------------|-------------|-------------|
| Staphylococcus aureus | No. of isolates | 2817 | 2992 | 2901 | 3056 |
| | Clindamycin | 31 | 26 | 26 | 27 |
| | Erythromycin | 33 | 31 | 32 | 31 |
| | Fusidic acid | 3 | 3 | 3 | 5 |
| | Gentamicin | 11 | 12 | 9 | 8 |
| | Linezolid | 0 | 0 | 0 | 0 |
| | Penicillin | 87 | 84 | 87 | 86 |
| | Trimethoprim+sulfamethoxazole | 2 | 2 | 1 | 2 |
| | Vancomycin | 0 | 0 | 0 | 0 |
| | MRSA | 22 | 20 | 19 | 21 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|-------------------------|-------------------------------|-------------|-------------|-------------|-------------|
| Escherichia coli | No. of isolates | 4575 | 4732 | 4409 | 4298 |
| | Amikacin | 3 | 2 | 1 | 1 |
| | Amoxicillin+clavulanic acid | 31 | 33 | 27 | 25 |
| | Ampicillin | 72 | 73 | 74 | 72 |
| | Cefotaxime | 31 | 30 | 29 | 29 |
| | Ceftazidime | 30 | 29 | 28 | 27 |
| | Ceftriaxone | 30 | 29 | 28 | 27 |
| | Cefuroxime | 37 | 37 | 36 | 35 |
| | Ciprofloxacin | 38 | 36 | 36 | 35 |
| | Ertapenem | 0 | 0 | 0 | 1 |
| | Gentamicin | 30 | 29 | 28 | 28 |
| | Imipenem | 0 | 0 | 0 | 0 |
| | Levofloxacin | 37 | 35 | 33 | 31 |
| | Meropenem | 0 | 0 | 0 | 0 |
| | Nitrofurantoin | 7 | 8 | 6 | 4 |
| | Piperacillin+ tazobactam | 6 | 6 | 6 | 5 |
| | Trimethoprim+sulfamethoxazole | 46 | 46 | 45 | 45 |
| | ESBL | 28 | 28 | 27 | 26 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|---------------------------|-------------------------------|-------------|-------------|-------------|-------------|
| Klebsiella species | No. of isolates | 1772 | 1967 | 1982 | 1890 |
| | Amikacin | 1 | 1 | 1 | 2 |
| | Amoxicillin+clavulanic acid | 20 | 19 | 16 | 18 |
| | Ampicillin | 99 | 99 | 99 | 99 |
| | Cefotaxime | 19 | 17 | 16 | 19 |
| | Ceftazidime | 19 | 16 | 15 | 19 |
| | Ceftriaxone | 18 | 16 | 14 | 18 |
| | Cefuroxime | 30 | 27 | 25 | 26 |
| | Ciprofloxacin | 22 | 20 | 18 | 21 |
| | Ertapenem | 0 | 1 | 1 | 1 |
| | Gentamicin | 9 | 9 | 7 | 9 |
| | Imipenem | 0 | 0 | 1 | 1 |
| | Levofloxacin | 17 | 15 | 12 | 16 |
| | Meropenem | 0 | 0 | 1 | 1 |
| | Nitrofurantoin | 61 | 65 | 65 | 63 |
| | Piperacillin+ tazobactam | 9 | 9 | 8 | 10 |
| | Trimethoprim+sulfamethoxazole | 24 | 25 | 23 | 26 |
| | ESBL | 17 | 14 | 13 | 16 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|-------------------------------|-----------------------------|-------------|-------------|-------------|-------------|
| Pseudomonas aeruginosa | No. of isolates | 1170 | 1082 | 1009 | 1147 |
| | Amikacin | 5 | 2 | 1 | 2 |
| | Cefepime | 9 | 5 | 3 | 5 |
| | Cefoperazone+sulbactam | 15 | 14 | 14 | 16 |
| | Ceftazidime | 7 | 5 | 5 | 6 |
| | Ciprofloxacin | 15 | 14 | 14 | 14 |
| | Gentamicin | 11 | 5 | 3 | 5 |
| | Imipenem | 19 | 17 | 15 | 17 |
| | Levofloxacin | 22 | 17 | 17 | 19 |
| | Meropenem | 14 | 15 | 12 | 15 |
| | Piperacillin+ tazobactam | 8 | 6 | 6 | 7 |
| | Ticarcillin+clavulanic acid | 63 | 72 | 71 | 74 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-----------------------------|------------|------------|------------|------------|
| Acinetobacter species | No. of isolates | 372 | 443 | 444 | 358 |
| | Amikacin | 13 | 7 | 6 | 6 |
| | Ampicillin+subactam | 17 | 9 | 7 | 7 |
| | Cefepime | 24 | 13 | 9 | 12 |
| | Cefoperazone+sulbactam | 15 | 9 | 8 | 10 |
| | Ceftazidime | 21 | 16 | 12 | 15 |
| | Ciprofloxacin | 25 | 13 | 13 | 13 |
| | Gentamicin | 18 | 8 | 8 | 9 |
| | Imipenem | 20 | 12 | 8 | 12 |
| | Levofloxacin | 21 | 12 | 11 | 12 |
| | Meropenem | 19 | 12 | 8 | 10 |
| | Piperacillin+ tazobactam | 22 | 17 | 12 | 14 |
| | Ticarcillin+clavulanic acid | 42 | 32 | 26 | 22 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|---------------------------------|-------------------------------|------------|------------|------------|------------|
| Streptococcus pneumoniae | No. of isolates | N/A | 222 | 242 | 342 |
| | Cefotaxime | N/A | 10 | 6 | 3 |
| | Ceftriaxone | N/A | 7 | 4 | 2 |
| | Clindamycin | N/A | 66 | 70 | 66 |
| | Erythromycin | N/A | 79 | 77 | 78 |
| | Levofloxacin | N/A | 1 | 3 | 0 |
| | Penicillin | N/A | 9 | 3 | 2 |
| | Trimethoprim+sulfamethoxazole | N/A | 59 | 64 | 52 |
| | Vancomycin | N/A | 0 | 0 | 0 |

Antibiogram for out-patient setting

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-------------------------------|-------------|-------------|-------------|-------------|
| Staphylococcus aureus | No. of isolates | 1233 | 1309 | 1297 | 1568 |
| | Clindamycin | 27 | 26 | 25 | 28 |
| | Erythromycin | 32 | 32 | 29 | 33 |
| | Fusidic acid | 4 | 4 | 5 | 5 |
| | Gentamicin | 8 | 8 | 5 | 8 |
| | Linezolid | 0 | 0 | 0 | 0 |
| | Penicillin | 91 | 86 | 88 | 89 |
| | Trimethoprim+sulfamethoxazole | 2 | 3 | 2 | 1 |
| | Vancomycin | 0 | 0 | 0 | 0 |
| | MRSA | 18 | 20 | 16 | 18 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|-------------------------|-------------------------------|-------------|-------------|-------------|-------------|
| Escherichia coli | No. of isolates | 3803 | 3756 | 3801 | 3580 |
| | Amikacin | 3 | 1 | 1 | 1 |
| | Amoxicillin+clavulanic acid | 24 | 28 | 26 | 23 |
| | Ampicillin | 68 | 72 | 74 | 72 |
| | Cefotaxime | 21 | 21 | 19 | 21 |
| | Ceftazidime | 21 | 20 | 19 | 19 |
| | Ceftriaxone | 20 | 21 | 20 | 20 |
| | Cefuroxime | 24 | 25 | 25 | 24 |
| | Ciprofloxacin | 30 | 29 | 30 | 29 |
| | Ertapenem | 0 | 0 | 0 | 1 |
| | Gentamicin | 28 | 26 | 25 | 24 |
| | Imipenem | 0 | 0 | 0 | 1 |
| | Levofloxacin | 28 | 27 | 26 | 26 |
| | Meropenem | 0 | 0 | 0 | 1 |
| | Nitrofurantoin | 8 | 6 | 6 | 4 |
| | Piperacillin+ tazobactam | 4 | 3 | 4 | 4 |
| | Trimethoprim+sulfamethoxazole | 42 | 40 | 41 | 40 |
| | ESBL | 20 | 20 | 18 | 18 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|---------------------------|-------------------------------|------------|------------|------------|------------|
| Klebsiella species | No. of isolates | 662 | 728 | 675 | 714 |
| | Amikacin | 1 | 0 | 1 | 3 |
| | Amoxicillin+clavulanic acid | 21 | 21 | 23 | 21 |
| | Ampicillin | 99 | 100 | 100 | 100 |
| | Cefotaxime | 21 | 20 | 20 | 23 |
| | Ceftazidime | 20 | 17 | 19 | 22 |
| | Ceftriaxone | 19 | 18 | 16 | 21 |
| | Cefuroxime | 23 | 25 | 26 | 27 |
| | Ciprofloxacin | 22 | 18 | 21 | 22 |
| | Ertapenem | 1 | 1 | 1 | 1 |
| | Gentamicin | 11 | 12 | 10 | 11 |
| | Imipenem | 0 | 0 | 0 | 0 |
| | Levofloxacin | 17 | 15 | 16 | 17 |
| | Meropenem | 0 | 0 | 0 | 0 |
| | Nitrofurantoin | 65 | 73 | 70 | 71 |
| | Piperacillin+ tazobactam | 12 | 9 | 12 | 12 |
| | Trimethoprim+sulfamethoxazole | 26 | 23 | 25 | 23 |
| | ESBL | 14 | 15 | 16 | 18 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|-------------------------------|-----------------------------|------------|------------|------------|------------|
| Pseudomonas aeruginosa | No. of isolates | 301 | 263 | 276 | 326 |
| | Amikacin | 4 | 0 | 1 | 2 |
| | Cefepime | 5 | 2 | 3 | 3 |
| | Cefoperazone+sulbactam | 9 | 11 | 14 | 7 |
| | Ceftazidime | 2 | 2 | 2 | 6 |
| | Ciprofloxacin | 15 | 8 | 10 | 12 |
| | Gentamicin | 10 | 2 | 2 | 8 |
| | Imipenem | 10 | 8 | 12 | 11 |
| | Levofloxacin | 21 | 9 | 16 | 16 |
| | Meropenem | 5 | 7 | 14 | 7 |
| | Piperacillin+ tazobactam | 5 | 2 | 4 | 4 |
| | Ticarcillin+clavulanic acid | 59 | 70 | 49 | 74 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|------------------------------|-----------------------------|-----------|-----------|-----------|-----------|
| Acinetobacter species | No. of isolates | 44 | 63 | 50 | 89 |
| | Amikacin | 15 | 5 | 4 | 1 |
| | Ampicillin+subactam | 10 | 2 | 5 | 3 |
| | Cefepime | 13 | 4 | 8 | 4 |
| | Cefoperazone+sulbactam | 10 | 2 | 5 | 3 |
| | Ceftazidime | 13 | 11 | 10 | 7 |
| | Ciprofloxacin | 12 | 14 | 19 | 11 |
| | Gentamicin | 15 | 8 | 4 | 1 |
| | Imipenem | 11 | 11 | 5 | 3 |
| | Levofloxacin | 12 | 4 | 13 | 9 |
| | Meropenem | 14 | 9 | 4 | 4 |
| | Piperacillin+ tazobactam | 16 | 13 | 15 | 8 |
| | Ticarcillin+clavulanic acid | 25 | 4 | 19 | 11 |

| Organism | Drug | 2014 | 2015 | 2016 | 2017 |
|---------------------------------|-------------------------------|------------|-----------|-----------|------------|
| Streptococcus pneumoniae | No. of isolates | N/A | 46 | 93 | 128 |
| | Cefotaxime | N/A | 3 | 4 | 1 |
| | Ceftriaxone | N/A | 2 | 3 | 1 |
| | Clindamycin | N/A | 54 | 47 | 68 |
| | Erythromycin | N/A | 58 | 60 | 71 |
| | Levofloxacin | N/A | 3 | 1 | 4 |
| | Penicillin | N/A | 3 | 4 | 0 |
| | Trimethoprim+sulfamethoxazole | N/A | 36 | 44 | 50 |
| | Vancomycin | N/A | 0 | 0 | 0 |

- Key:**
1. Non-duplicated in all kind of specimens.
 2. Interpreted according to CLSI definition.
 3. Nonsusceptible include both intermediate and resistant
 4. ESBL, extended spectrum beta-lactamase.
 5. MRSA, Methicillin-resistant *Staphylococcus aureus*.
 6. N/A: not available