**[Facility Logo]**

**Antibiotic Susceptibility Report for Most Frequently Isolated Gram-Negative Organisms (January 2015 to December 2016)**

|  |  |  |
| --- | --- | --- |
| **Pathogen** | **Isolate Tested** | **Percent Susceptible** |
| **Ampicillin** | **Ampicillin/Sulbactam** | **Piperacillin/Tazobactam** | **Cefazolin** | **Cefepime** | **Cefoxitin** | **Ceftazidime** | **Ceftriaxone** | **Cefuroxime** | **Aztreonam** | **Ertapenem** | **Meropenem** | **Amikacin** | **Gentamicin** | **Tobramycin** | **Ciprofloxacin** | **Levofloxacin** | **Trimethoprim/Sulfa** | **Nitrofurantoin1** | **Tetracycline** |
| ***Escherichia coli*** | 111 | 53 | 59 | 99 | 86 | 98 | 92 | 98 | 97 | 91 | 98 | 100 | 100 | 100 | 91 | 91 | 58 | 59 | 76 | 99 | 77 |
| ***Klebsiella pneumoniae*** | 41 | -- | 78 | 98 | 93 | 98 | 95 | 98 | 98 | 93 | 98 | 100 | 100 | 100 | 98 | 98 | 95 | 95 | 93 | 63 | 83 |
| ***Proteus mirabilis*** | 41 | 98 | 98 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 75 | 75 | 75 | 50 | 75 |
| ***Pseudomonas aeruginosa*** | 31 | -- | -- | 97 | -- | 97 | -- | 97 | -- | -- | 84 | -- | 90 | 100 | 74 | 77 | 71 | 71 | -- | -- | -- |

-- Denotes organism has intrinsic resistance to this antimicrobial
1. Nitrofurantoin is reported for urine sources only

***Summary for Gram-Negative Organisms***

During the 2-year period between January 2015 and December 2016, a total of 111 *E coli* were identified, making it the most commonly identified Gram-negative pathogen. Antibiotic susceptibility of these *E coli can be summarized as follow:*

1. Oral antibiotics with the ***highest*** susceptibilities (in descending order) were:
	1. Nitrofurantoin (99%)
	2. Cefuroxime (91%)
	3. Cephalexin (86%, as indicated by cefazolin susceptibility)
	4. Trimethoprim/sulfamethoxazole (76%)

1. Susceptibilities of antibiotics available only in intravenous formulation (e.g., ceftriaxone) exceed 90%, except:
	1. Ampicillin/sulbactam (59%)
	2. Cefazolin (86%)

*Antibiotic susceptibility data can be useful for guiding selection of empiric antibiotic therapy for residents in whom culture and susceptibility data from the past few months are not available.*

**Antibiotic Susceptibility Report for Most Frequently Isolated Gram-Positive Organisms (January 2015 to December 2016)**

|  |  |  |
| --- | --- | --- |
| **Pathogen** | **Isolate Tested\*** | **Percent Susceptible** |
| **Penicillin** | **Ampicillin** | **Oxacillin1** | **Gentamicin** | **Ciprofloxacin2** | **Levofloxacin2** | **Moxifloxacin** | **Trimethoprim/Sulfa** | **Clindamycin3** | **Daptomycin4** | **Nitrofurantoin5** | **Linezolid** | **Vancomycin** | **Tetracycline2** |
| ***Staph. aureus (MSSA)* 40%** | 8 | -- | -- | 100 | 100 | 13 | 13 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| ***Staph. aureus (MRSA)* 60%** | 12 | -- | -- | 0 | 100 | 8 | 8 | 80 | 92 | 60 | 100 | 100 | 100 | 100 | 100 |
| ***Enterococcus faecalis*** | 45 | 98 | 100 | -- | -- | 60 | 71 | -- | -- | -- | 100 | 100 | 100 | 100 | 22 |

\* Antibiogram with <30 isolates are of questionable statistical significance; interpret data with caution -- Denotes organism has intrinsic resistance to or is not tested against this antibiotic

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

2. For *E faecalis*: ciprofloxacin, levofloxacin, tetracycline is reported for urine sources only

3. For *Staphylococcus* species: clindamycin is reported for non-urine sources only

4. For *Staphylococcus* species: daptomycin is reported for non-respiratory sources only

5. Nitrofurantoin is reported for urine sources only

***Summary for Gram-Positive Organisms***

During the 2-year period between January 2015 and December 2016, a total of 45 *E faecaisi* were identified, making it the most commonly identified Gram-positive pathogen. Antibiotic susceptibility of these *E faecalis can be summarized as follow:*

1. Oral antibiotics with the ***highest*** susceptibilities were:
	1. Ampicillin or amoxicillin (100%)
	2. Nitrofurantoin (100%)
	3. Linezolid (100%)
2. Intravenous antibiotics with the ***highest*** susceptibilities were:
	1. Ampicillin (100%)
	2. Daptomycin (100%)
	3. Linezolid (100%)
	4. Vancomycin (100%)

*Antibiotic susceptibility data can be useful for guiding selection of empiric antibiotic therapy for residents in whom culture and susceptibility data from the past few months are not available.*