

# Comprehensive Antibiogram Toolkit: Phase 2

## Sample Antibiogram

Nursing Home Name/Clinical Laboratory Name  
Antibiogram for dd/mm/yyyy to dd/mm/yyyy

Gram Negative					Gram Positive			
Antibiotic Tested	<i>Escherichia coli</i>	<i>Klebsiella pneumoniae</i>	<i>Proteus mirabilis</i>	<i>Pseudomonas aeruginosa</i>	<i>Staphylococcus aureus</i> Non-MRSA	<i>Staphylococcus aureus</i> MRSA †	<i>Staphylococcus coag. Neg</i>	<i>Enterococcus sp</i>
# of Isolates‡	165	75	39	33	10*	35	18	68
Oral or Oral Equivalent					Oral or Oral Equivalent			
Ampicillin	46%	0%	62%		50%	0%	50%	96%
Amox/Clav	77%	96%	100%					
Cefazolin	70%	93%	88%		100%	0%	50%	
Cefoxitin	82%	100%	100%					
Ceftriaxone	85%	79%	92%					
Ciprofloxacin	58%	79%	62%	56%		0%	0%	47%
Levofloxacin	59%	79%	62%	57%	33%	20%	0%	64%
Nitrofurantoin	100%	0%	0%		100%	100%	100%	100%
TMP/SMX	64%	79%	54%		67%	100%	100%	
Tetracycline	64%	60%	0%		100%	100%	80%	38%
Oxacillin					100%	0%	50%	
Clindamycin					50%	50%	100%	
Erythromycin					50%	0%	0%	
Linezolid					100%	100%		100%
IV Only					IV Only			
PIP/TAZ	98%	96%	100%	100%				
Cefepime	89%	95%	92%	91%				
Ceftazidime				91%				
Gentamicin	85%	83%	92%	91%	100%	100%	67%	
Imipenem	100%	100%	100%	71%				
Vancomycin					100%	100%	100%	100%

\*Organisms with fewer than 30 isolates should be interpreted with caution, as small numbers may bias the group susceptibilities.

† MRSA = Methicillin-resistant *Staphylococcus aureus*, represents a subset of all *Staphylococcus aureus* isolates

‡ N = pooled isolates by species from urine, wound, sputum, and blood specimens

Abbreviations: Amox/Clav = Amoxicillin/Clavunate; PIP/TAZ = Piperacillin/Tazobactam; TMP/SMX = Trimethoprim/Sulfamethoxazole.

Please direct questions to: [Program champion name, phone, email].



Agency for Healthcare Research and Quality  
Advancing Excellence in Health Care • [www.ahrq.gov](http://www.ahrq.gov)



[NURSING HOME NAME] Key Antibigram Findings from dd/mm/yyyy to dd/mm/yyyy)

**THE FOLLOWING IS SAMPLE TEXT TO BE EDITED BASED ON YOUR NURSING HOME'S ANTIBIOGRAM**

- **Most of our data come from urine cultures:** Of XXX cultures used to make the antibiograms, XX% were urine cultures, YY% were wound cultures, and Z% were sputum cultures. The antibiograms will be most applicable when selecting antibiotics to treat urine infections and systemic infections that may have come from the urine.
- The leading organisms for positive urine cultures were:
  - *E. coli*: XX% of urine cultures
  - *Enterococcus species*: XX%
  - *Klebsiella pneumoniae*: XX%
  - *Proteus mirabilis*: XX%
- **Not all antibiotics are tested.** One antibiotic from each class is usually tested. Antibiotics from the same class are likely to have similar resistance patterns, for example with cephalosporins:
  - 1st generation: Cefazolin (*Ancef*) was tested; a comparable oral agent is cephalexin (*Keflex*).
  - 2nd generation: Cefoxitin (*Mefoxin*) was tested; a comparable oral agent is cefuroxime (*Ceftin*).
  - 3rd generation: Ceftriaxone (*Rocephin*) was tested; a comparable oral agent is cefpodoxime (*Simplicef, Vantin*).

**Urinary tract infections (UTIs) from gram-negative organisms**

- XX% of positive urine cultures were due to gram-negative organisms.
- Significant resistance to commonly used antibiotics is seen among the gram-negative organisms that frequently cause UTIs (*E. coli*, *Klebsiella*):
  - TMP/SMX (*Bactrim*) sensitivity for *E. coli* is limited (XX%).
  - Quinolones' sensitivity for *E. coli* is limited (levofloxacin [*Levaquin*] XX%, ciprofloxacin [*Cipro*] XX%).
  - First-generation cephalosporins' sensitivity for *E. coli* is limited: cefazolin (*Ancef*) XX%.
- Nitrofurantoin (*Macrobid*) has good sensitivity for *E. coli* (XX%) but poor activity against other urinary pathogens.

**Gram positives**

- XX of XX (XX%) *S. aureus* cultures were MRSA.
- MRSA was XX% sensitive to TMP/SMX (*Bactrim*), and XX% sensitive to clindamycin (*Cleocin*).