

Organism susceptibility to antibacterials: tetracyclines and other antibacterials

The following table provides a general guide to clinical antimicrobial susceptibilities. The table is intended to assist empirical selection of antimicrobials in the absence of laboratory confirmation of susceptibility; it is not a substitute for management advice from clinical microbiologists or infectious diseases specialists. Consider these data in conjunction with the clinical condition of the patient, site of infection, knowledge of local susceptibility patterns (which may vary) and evidence-based guidelines. Use the narrowest spectrum antibiotic that is effective to limit the development of antimicrobial resistance. When in doubt seek specialist advice.

The designation of susceptibility used in the table is 75% (an organism is deemed susceptible if at least 3 out of 4 cultures tested are susceptible to that antibiotic).

Organism	Tetracyclines		Other antibacterials									
	doxycycline	minocycline	aztreonam	daptomycin	fosfomycin	linezolid	metronidazole	nitrofurantoin ¹	sodium fusidate	tigecycline	trimethoprim	trimethoprim with sulfamethoxazole
Gram-negative												
<i>Acinetobacter</i> spp.										v		v
<i>Aeromonas</i> spp.												
<i>Burkholderia cepacia</i>												
<i>Burkholderia pseudomallei</i>	2	2										
<i>Campylobacter jejuni</i> and <i>coli</i>												
<i>Citrobacter freundii</i>												
<i>Enterobacter</i> spp.					v			v				
<i>Escherichia coli</i>												
<i>Haemophilus influenzae</i>												
<i>Klebsiella</i> spp.					v							
<i>Moraxella catarrhalis</i>												
<i>Morganella</i> spp.												
<i>Neisseria gonorrhoeae</i>												
<i>Neisseria meningitidis</i>												
<i>Pasteurella multocida</i>												
<i>Proteus mirabilis</i>												
<i>Proteus vulgaris</i>					v							
<i>Providencia</i> spp.												
<i>Pseudomonas aeruginosa</i>					v							
<i>Salmonella</i> spp.												
<i>Serratia</i> spp.					v							
<i>Shigella</i> spp.												
<i>Stenotrophomonas maltophilia</i>												
<i>Yersinia</i> spp.												
¹ urinary isolates only												
² use with another antibacterial												
³ MRSA: implies resistance to all beta-lactams												
⁴ most community-acquired MRSA are susceptible												
⁵ susceptible <i>in vitro</i> , insufficient or limited clinical data												
Legend												
	susceptible											
v	variable											
	resistant											
	no data available or antibacterial not recommended											

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	doxycycline	minocycline	aztreonam	daptomycin	fosfomycin	linezolid	metronidazole	nitrofurantoin ¹	sodium fusidate	tigecycline	trimethoprim	trimethoprim with sulfamethoxazole
Gram-positive												
<i>Corynebacterium jeikeium</i>												
<i>Enterococcus faecalis</i>					v							
<i>Enterococcus faecium</i>												
<i>Listeria</i> spp.												
<i>Staphylococcus aureus</i>											1	
<i>Staphylococcus aureus</i> (MRSA) ³											1	4
<i>Staphylococcus epidermidis</i>												v
<i>Staphylococcus lugdunensis</i>												
<i>Staphylococcus saprophyticus</i>												
<i>Streptococcus</i> - group A, B, C, G												
<i>Streptococcus anginosus</i>												
<i>Streptococcus pneumoniae</i>												
Viridans streptococcus group												
Anaerobes												
<i>Actinomyces</i>												
<i>Bacteroides fragilis</i> group												
<i>Clostridioides difficile</i>												
<i>Clostridium perfringens</i>												
<i>Cutibacterium (Propionibacterium) acnes</i>												
<i>Fusobacteria</i> spp.												
<i>Peptostreptococcus</i> spp.												
<i>Prevotella melaninogenica</i>												
Miscellaneous												
<i>Chlamydomphila, Chlamydia</i> spp.						5						
<i>Legionella</i> spp.						5						
<i>Mycobacterium avium</i> complex						5						
<i>Mycobacterium tuberculosis</i>						5						
<i>Mycoplasma pneumoniae</i>						5						
<i>Nocardia</i> spp.												
¹ urinary isolates only ² use with another antibacterial ³ MRSA: implies resistance to all beta-lactams ⁴ most community-acquired MRSA are susceptible ⁵ susceptible <i>in vitro</i> , insufficient or limited clinical data												
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