

Organism susceptibility to antibacterials: aminoglycosides, carbapenems, glycopeptides, lincosamides

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	Aminoglycosides			Carbapenems			Glycopeptides		Lincosamides	
	amikacin	gentamicin	tobramycin	ertapenem	imipenem	meropenem	vancomycin	teicoplanin	clindamycin	lincomycin
Gram-negative										
<i>Acinetobacter</i> spp.										
<i>Aeromonas</i> spp.			1							
<i>Burkholderia cepacia</i>										
<i>Burkholderia pseudomallei</i>										
<i>Campylobacter jejuni</i> and <i>coli</i>										
<i>Citrobacter freundii</i>										
<i>Enterobacter</i> spp.										
<i>Escherichia coli</i>										
<i>Haemophilus influenzae</i>										
<i>Klebsiella</i> spp.										
<i>Moraxella catarrhalis</i>										
<i>Morganella</i> spp.										
<i>Neisseria gonorrhoeae</i>		1,2				1				
<i>Neisseria meningitidis</i>										
<i>Pasteurella multocida</i>						1				
<i>Proteus mirabilis</i>										
<i>Proteus vulgaris</i>										
<i>Providencia</i> spp.										
<i>Pseudomonas aeruginosa</i>										
<i>Salmonella</i> spp.	3	3	3							
<i>Serratia</i> spp.										
<i>Shigella</i> spp.	3	3	3							
<i>Stenotrophomonas maltophilia</i>										
<i>Yersinia</i> spp.	1		1							
<div><div>1</div>likely susceptible but currently validated laboratory breakpoints not available</div> <div><div>2</div>in combination with azithromycin</div> <div><div>3</div>organism can test susceptible, but antibacterial clinically ineffective</div> <div><div>4</div>sometimes used for synergistic effect with beta-lactam antibacterial</div> <div><div>5</div>some strains may not be susceptible</div> <div><div>6</div>MRSA: implies resistance to all beta-lactams</div> <div><div>7</div>can be used if susceptible to beta-lactam antibacterial</div> <div><div>8</div>use with beta-lactam antibacterial for Group B streptococcus only, eg in neonatal sepsis</div>										
Legend										
	susceptible									
v	variable									
	resistant									
	no data available or antibacterial not recommended									

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	amikacin	gentamicin	tobramycin	ertapenem	imipenem	meropenem	vancomycin	teicoplanin	clindamycin	lincomycin
Gram-positive										
<i>Corynebacterium jeikeium</i>										
<i>Enterococcus faecalis</i>		4								
<i>Enterococcus faecium</i>							v,5	v,5		
<i>Listeria</i> spp.		4								
<i>Staphylococcus aureus</i>	4	4	4							
<i>Staphylococcus aureus</i> (MRSA) ⁶									v	v
<i>Staphylococcus epidermidis</i>				7	7	7				
<i>Staphylococcus lugdunensis</i>										
<i>Staphylococcus saprophyticus</i>										
<i>Streptococcus</i> - group A, B, C, G		4,8							v	v
<i>Streptococcus anginosus</i>		4								
<i>Streptococcus pneumoniae</i>										
Viridans streptococcus group		4								
Anaerobes										
<i>Actinomyces</i>										
<i>Bacteroides fragilis</i> group										
<i>Clostridioides difficile</i>										
<i>Clostridium perfringens</i>										
<i>Cutibacterium</i> (<i>Propionibacterium</i>) <i>acnes</i>										
<i>Fusobacteria</i> spp.										
<i>Peptostreptococcus</i> spp.										
<i>Prevotella melaninogenica</i>										
Miscellaneous										
<i>Chlamydomphila</i> , <i>Chlamydia</i> spp.										
<i>Legionella</i> spp.										
<i>Mycobacterium avium</i> complex										
<i>Mycobacterium tuberculosis</i>										
<i>Mycoplasma pneumoniae</i>										
<i>Nocardia</i> spp.										
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