

## Department of Clinical Microbiology, LabPLUS, Auckland City Hospital

Clinical Microbiologists, Dr Sally Roberts and Dr Joshua Freeman can be contacted through Lablink on 09 3078995 or 0800 5227587 (0800 LABPLUS)

Table 1: Gram positive isolates recovered from clinical specimens: % susceptible; 2015

Organism (number tested)	Penicillin	Amoxicillin	Flucloxacillin	Erythromycin	Cotrimoxazole	Tetracycline	Doxycycline	Clindamycin	Ciprofloxacin	Rifampicin	Gentamicin	Amikacin	Vancomycin	Fusidic acid	Mupirocin	Ceftriaxone	Moxifloxacin	Nitrofurantoin	Norfloxacin
Methicillin-susceptible <i>Staphylococcus aureus</i> - MSSA (3758)	14		100	90	92		99	92	96	100	100	100 (56)	100	81	92				
Methicillin-resistant <i>Staphylococcus aureus</i> - MRSA (573) <sup>a</sup>	R		R	72	95		99	85	85	100	98	100 (10)	100	51	92				
<i>Staphylococcus epidermidis</i> (533)	2		27	44	48		94	62 (440)	64	79	56	94 (17)	100	40					
Coagulase negative <i>Staphylococci</i> (313) <sup>b</sup>	15		50	62	79		96	77 (262)	76	99	72	100 (13)	100	81					
<i>Streptococcus pyogenes</i> (835)	100			96		87							100						
<i>Streptococcus agalactiae</i> (184)	100			81		30							100						
<i>Streptococcus pneumoniae</i> (39) <sup>c</sup> - non-meningitis criteria	92			87		62							100			92	100 (12)		
- meningitis criteria	62												100			90	100 (12)		
<i>Enterococcus faecalis</i> (1025) <sup>d</sup>		100											100					99 <sup>e</sup>	79 <sup>e</sup> (863)
<i>Enterococcus faecium</i> (111) <sup>d</sup>		18											97					7 <sup>e</sup>	10 <sup>e</sup> (63)

- MRSA are also resistant to cefazolin, amoxicillin/clavulanate, cephalosporins and carbapenems.
- Routine testing of urine isolates of *Staphylococcus saprophyticus* is not recommended. Infections respond to concentrations achieved in the urine of antimicrobial agents commonly used to treat acute uncomplicated urinary tract infections (eg penicillin, nitrofurantoin, trimethoprim/sulfamethoxazole)
- Streptococcus pneumoniae* isolates are from blood cultures and CSF only. When meningitis is suspected, a penicillin MIC of  $\leq 0.06$  mg/L and a ceftriaxone MIC of  $\leq 0.5$  mg/L is considered susceptible. For non-meningitis isolates, a penicillin MIC of  $\leq 0.06$  mg/L can predict susceptibility to penicillin (oral or parenteral), amoxicillin, amoxicillin-clavulanate, cefaclor, cefuroxime cefotaxime, ceftriaxone, cefepime, ertapenem, and meropenem. Supplementary testing of other  $\beta$ -lactam agents may be warranted if penicillin MIC is  $\geq 0.12$ mg/L and use of other agent is considered. For further advice contact the Clinical Microbiologist.
- Enterococcus* species: cephalosporins, clindamycin, gentamicin and cotrimoxazole are not effective clinically. For advice on the treatment and management of patients infected or colonised with vancomycin-resistant enterococci (VRE) contact the Clinical Microbiologist.
- Nitrofurantoin and Norfloxacin only apply to lower urinary tract *Enterococcus* isolates