

2013 ANTIBIOTIC SUSCEPTIBILITY PROFILES



	<i>Staphylococcus aureus</i>	<i>Streptococcus pyogenes</i> (Gp A Haemolytic Strep.)	<i>Streptococcus pneumoniae</i>	<i>Moraxella catarrhalis</i>	<i>Haemophilus influenzae</i>	<i>Pseudomonas aeruginosa</i>	URINE					
							<i>E.coli</i>	<i>Klebsiella</i> species	<i>Proteus mirabilis</i>	<i>Enterobacter / Serratia</i> spp.	<i>Enterococcus</i> species	<i>Staphylococcus saprophyticus</i>
Number of Isolates	4321		1893		450	176	4136	527	2677	900	380	421
PENICILLIN		S	79 c	R	R	R						
FLUCLOXACILLIN	91	S		R	R	R						
AMOXYCILLIN		S	79 d	R	67	R	52	R	89	R	98	V f
AMOX / CLAV	91 a	S	79 d	S	87	R	95	95	99	R	98 d	S f
CEFACLOL	91 a	S		S		R	97	95	99	R	R	S f
COTRIMOXAZOLE	100			S	75	R	78 g	83 g	81 g	83 g	R	95 g
ERYTHROMYCIN	89	S	81		R e	R						
CLINDAMYCIN	89b	S	87			R						
TETRACYCLINE			81	S	96	R						
GENTAMICIN						94	S	S	S	S		
CIPROFLOXACIN						97	91 h	90 h	97 h	89 h		
NITROFURANTOIN						R	99	84	R	42	99	100
TRIMETHOPRIM						R	78	83	81	83	R	95

The percentage of organisms susceptible to an antibiotic is recorded (with the sample size in the first row of the table).
(e.g. *Staphylococcus aureus* vs. flucloxacillin 91% susceptible, n=4321)

S = Not specifically tested, but known to be ordinarily susceptible. R = Organism resistant or antibiotic inappropriate
V = Variable susceptibility.

- S. aureus* susceptible to flucloxacillin can be considered susceptible to amoxycillin-clavulanate and cefaclor. Methicillin resistant *Staphylococcus aureus* (i.e. MRSA) are resistant to all beta-lactam antibiotics (penicillins, cephalosporins, carbapenems).
- Clindamycin susceptibility is extrapolated from the erythromycin result.
- S. pneumoniae* susceptible to penicillin can be considered susceptible to amoxycillin, amoxycillin-clavulanate, cefaclor, cefuroxime, cefotaxime, ceftriaxone, cefpodoxime, imipenem and meropenem. Confirmation of penicillin resistance (reduced susceptibility) in *S. pneumoniae* requires MIC testing. (Please note this figure includes both penicillin susceptible and intermediately susceptible isolates). *S. pneumoniae* isolates intermediately susceptible to penicillin are resistant to cefaclor. In 2013 our *S. pneumoniae* isolates demonstrated the following pattern of susceptibility to penicillin: 74% = Susceptible, 5% = Intermediate, 21% = Resistant. However, of the resistant strains only a few had a penicillin MIC > 4mg/L, and penicillins (amoxycillin) are effective against strains with MIC <= 4mg/L, unless they are causing meningitis.
- Susceptibility is extrapolated from an indicator beta-lactam result.
- Erythromycin is not recommended for treatment of infections thought to be due to *H. influenzae*.
- S. saprophyticus* causing urinary tract infections will usually respond to amoxycillin-clavulanate and cephalosporins. (Up to 50% of isolates are resistant to amoxycillin).
- Cotrimoxazole susceptibility is extrapolated from the trimethoprim result.
- Derived from nalidixic acid result.

MOST LIKELY BACTERIAL PATHOGENS IN COMMON CONDITIONS

1. RESPIRATORY INFECTIONS

- Pharyngitis - *Streptococcus pyogenes* (Gp A Haemolytic Strep.)
- Otitis Media/Sinusitis
 - *Streptococcus pneumoniae*
 - *Haemophilus influenzae*
 - *Moraxella catarrhalis*
- Acute exacerbation of Chronic Bronchitis
 - *Streptococcus pneumoniae*
 - *Haemophilus influenzae*
 - *Moraxella catarrhalis*

■ Community Acquired Pneumonia

- *Streptococcus pneumoniae*
- *Haemophilus influenzae*
- *Mycoplasma pneumoniae*
- *Chlamydia pneumoniae*
- *Staphylococcus aureus*
- (*Legionella* sp)

2. URINARY TRACT INFECTION

- *E.coli*
- *Proteus mirabilis*
- Other Coliforms (e.g. *Klebsiella*, *Enterobacter*).
- *Enterococcus* sp.
- *Staphylococcus saprophyticus*.

3. IMPETIGO / CELLULITIS

- *Staphylococcus aureus*
- *Streptococcus pyogenes*