

2012 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 species</i>	<i>Proteus mirabilis</i>	<i>Enterobacter / Serratia spp.</i>	<i>Enterococcus species</i>	<i>Staphylococcus saprophyticus</i>
Number of Isolates	4651		231		612	559	4414	498	383	143	765	376
PENICILLIN		S	82 c	R	R	R						
FLUCLOXACILLIN	91	S		R	R	R						
AMOXYCILLIN		S	82 d	R	69	R	52	R	86	R	99	V f
AMOX / CLAV	91	S	82 d	S	88	R	95	95	98	R	99 d	S f
CEFACLOR	91 a	S		S		R	97	95	99	R	R	S f
COTRIMOXAZOLE				S	73	R	80 g	81 g	81 g	83 g	R	97 g
ERYTHROMYCIN	88	S	84		R e	R						
CLINDAMYCIN	88 b	S	88			R						
TETRACYCLINE			83	S	96	R						
GENTAMICIN						94	S	S	S	S		
CIPROFLOXACIN						98	92 h	92 h	95 h	90 h		
NITROFURANTOIN						R	99	84	R	43	100	100
TRIMETHOPRIM						R	80	81	81	83	R	97

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=4651)

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 2012 our *S. pneumoniae* isolates demonstrated the following pattern of susceptibility to penicillin: 72% = Susceptible, 10% = Intermediate, 18% = 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*