

Enterococcus:

- Enterococci susceptible to penicillin are predictably susceptible to ampicillin, amoxicillin, amoxicillin-clavulanate, and piperacillin-tazobactam.
- Do not use Vancomycin if result of PCR testing from PHL indicates that VanA/VanB genes have been detected.
- Aminoglycosides, cephalosporins, clindamycin and trimethoprim-sulfamethoxazole are not effective.
- Daptomycin can be used for non-respiratory isolates of Enterococcus – no known resistance to date.
- Linezolid can be used (reserve for isolates resistant to ampicillin, penicillin, vancomycin).

Streptococcus pneumoniae:

- Nonmeningitis: Penicillin susceptible isolates of Streptococcus pneumoniae are susceptible to the following β -lactams: ampicillin (oral and parenteral), amoxicillin, amoxicillin-clavulanate, cefaclor, ceftriaxone, cefotaxime, cefuroxime, meropenem.
- Streptococcus pneumoniae isolates susceptible to levofloxacin are predictably susceptible to moxifloxacin. However, S. pneumoniae susceptible to moxifloxacin cannot be assumed to be susceptible to levofloxacin.
- For treatment of meningitis, isolates with MIC ≥ 0.12 mcg/mL are resistant to penicillin; refer to orderset for antibiotic treatment recommendations.

Staphylococcus:

- In practical terms, cloxacillin resistance is equivalent to methicillin resistance (e.g. MRSA).
- Cloxacillin-susceptible staphylococci can be considered susceptible to:
 - a) β -lactam/ β -lactamase inhibitor combinations (amoxicillin-clavulanate, piperacillin-tazobactam)
 - b) Oral cephalosporins (cefaclor, cephalexin, cefuroxime)
 - c) Parenteral cephalosporins I, II, III, IV (cefazolin, cefotaxime, ceftriaxone, and cefuroxime).
- Cloxacillin-resistant staphylococci are resistant to all currently available β -lactam antimicrobial agents.

 β hemolytic Streptococcus:

Includes Streptococcus pyogenes (Group A), Streptococcus agalactiae (Group B), Streptococcus dysgalactiae (Groups C and G)

- Penicillin is the drug of choice due to efficacy and relatively narrow spectrum.
- Given susceptibility to all β -lactams, in penicillin-allergic patient a cephalosporin or carbapenem can be used.

Haemophilus influenzae and Haemophilus parainfluenzae:

- For respiratory infections due to Haemophilus species, empiric therapy with amoxicillin-clavulanate, azithromycin, cefaclor, and cefuroxime is appropriate. The results of susceptibility tests with these antimicrobial agents are often not necessary for management of individual patients.
- Rare β -lactamase negative, ampicillin-resistant (BLNAR) strains of H. influenza should be considered resistant to amoxicillin-clavulanate, cefaclor, cefuroxime and piperacillin-tazobactam.
- CSF isolates of H. influenzae will be sent to PHL for susceptibility testing against the following antimicrobials (ampicillin, cefotaxime or ceftazidime or ceftriaxone, chloramphenicol and meropenem).