

## MEG Demo (Staff App) - MEG Demo - MEG Staff app: Respiratory Tract infections

### Antimicrobial Treatment of Respiratory Tract Infections

| Clinical Conditions (RTIs)                                                                                                                                                                                        | Likely Organisms                                                            | Antimicrobial and Dosage                                                                                              | Approx Duration of Therapy                                                                                                                                                 | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Community acquired pneumonia                                                                                                                                                                                      | Strep pneumoniae<br>Haemophilus Influenzae                                  | See Community-acquired pneumonia treatment algorithm                                                                  |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Empiric therapy                                                                                                                                                                                                   | Atypical organisms                                                          |                                                                                                                       |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Community acquired pneumonia                                                                                                                                                                                      | Legionella sp.                                                              | Mild-Moderate Disease<br>Ciprofloxacin 500mg-750mg PO BD OR Clarithromycin 500mg PO BD +/- Rifampicin 300-600mg PO BD |                                                                                                                                                                            | <ul style="list-style-type: none"> <li>Send sample for Legionella antigen test.</li> <li>Contact Consultant Microbiologist</li> </ul>                                                                                                                                                                                                                                                                                                                                                         |
| Specific therapy                                                                                                                                                                                                  |                                                                             | Severe Disease<br>Clarithromycin 500mg IV BD +<br>Ciprofloxacin 400mg IV BD or Ciprofloxacin 500mg-750mg PO BD        |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Healthcare-Associated Pneumonia (HAP) i.e.                                                                                                                                                                        | Gram negative aerobes<br>Staph aureus                                       | Piperacillin/tazobactam 4.5g IV TDS                                                                                   |                                                                                                                                                                            | <ol style="list-style-type: none"> <li>Contact Consultant Microbiologist in all cases.</li> <li>In penicillin-allergic patients Contact Consultant Microbiologist.</li> <li>Take sputum sample where possible for culture.</li> <li>Take recent isolates from infected sites into account.</li> <li>Note previous antibiotic therapy.</li> <li>Early (&lt;48 hours) post-operative pneumonia can be classified as community-acquired and treated with amoxicillin:clavulanic acid.</li> </ol> |
| <ul style="list-style-type: none"> <li>In-patient &gt;48 hours</li> <li>Recent hospitalisation in last 3 months</li> <li>Resident in long-term care facility or Nursing home</li> <li>Dialysis patient</li> </ul> |                                                                             |                                                                                                                       |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Empirical therapy                                                                                                                                                                                                 |                                                                             |                                                                                                                       |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| NB Change to appropriate organism-specific therapy if required once culture and sensitivity is obtained                                                                                                           |                                                                             |                                                                                                                       |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Acute tonsillitis                                                                                                                                                                                                 | Viral                                                                       | Antibiotics not indicated                                                                                             |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Acute otitis media                                                                                                                                                                                                | Strep pneumoniae<br>Haemophilus Influenzae<br>Moraxella                     | Amoxicillin 500mg PO TDS                                                                                              |                                                                                                                                                                            | In penicillin allergic patients:<br>Clarithromycin 500mg PO BD                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Empirical therapy                                                                                                                                                                                                 |                                                                             |                                                                                                                       |                                                                                                                                                                            | In penicillin allergic patients:<br>Clarithromycin 500mg PO BD                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Exacerbation of COPD                                                                                                                                                                                              | Haemophilus influenzae<br>Moraxella catarrhalis<br>Streptococcus pneumoniae | Amoxicillin:Clavulanic acid 500mg:125mg PO TDS                                                                        |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Empirical therapy                                                                                                                                                                                                 |                                                                             |                                                                                                                       |                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Pneumonia in immunocompromised adult                                                                                                                                                                              | Pneumocystis jirovecii (carinii)                                            | Sulfamethoxazole:trimethoprim 21 days 90-120mg/kg either IV or PO daily in 2 to 4 divided doses                       |                                                                                                                                                                            | <ol style="list-style-type: none"> <li>Contact Consultant Microbiologist.</li> <li>Oral prophylactic therapy is necessary once course of treatment is complete.</li> </ol>                                                                                                                                                                                                                                                                                                                    |
| Cytomegalovirus                                                                                                                                                                                                   | Ganciclovir 5mg/kg IV BD                                                    |                                                                                                                       | <ol style="list-style-type: none"> <li>Contact Consultant Microbiologist.</li> <li>Oral prophylactic therapy is necessary once course of treatment is complete.</li> </ol> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |