Respiratory tract infections in aged care: symptoms

1. **Common cold/pharyngitis**
   - Must have at least TWO of the following:
     - Runny nose or sneezing
     - Stuffy nose
     - Sore throat/Hoarseness/Pain on swallowing
     - Dry cough
     - Swollen or tender neck glands

2. **Influenza**
   - Temperature >38°C or 1.5°C above
   - Acute change in mental status
   - Acute functional decline
   PLUS at least ONE of the following (or TWO if no CXR):
     - Increased cough
     - New or increased sputum
     - SaO₂ <94%
     - Respiratory rate ≥ 25 bpm
     - Chest wall pain
     - New/changed lung examination abnormalities

3. **Pneumonia/LRTI**
   - Ideally will have:
     - CXR showing pneumonia or new infiltrate
   - Must have at least ONE of the following:
     - Temperature >38°C or 1.5° above
     - Acute change in mental status
     - Acute functional decline
   PLUS at least ONE of the following (or TWO if no CXR):
     - Increased cough
     - New or increased sputum
     - SaO₂ <94%
     - Respiratory rate ≥ 25 bpm
     - Chest wall pain
     - New/changed lung examination abnormalities

**Sputum Sample or Throat Swab Collected?**
- Yes
- No

**Sputum/Swab Results:**
- Positive
- Negative

**Infection Criteria met?**
- YES
- NO – consider other diagnosis eg CCF

**Antibiotic NOT indicated**
- Antibiotic NOT indicated
- STOP antibiotic if already initiated

**Version 1 correct as of June 2019**
Recommendations for antibiotic and antiviral therapy are made on the basis of Therapeutic Guidelines - Antibiotic (eTG April 2019 edition)

- Ensure appropriate doses of penicillins are used as low doses are more likely to select for resistance.
- If significant improvement after 2 to 3 days, treat for 5 days, if improvement slow continue for full 7 days.
- If no improvement after 48 hours reassess the diagnosis.
- Fluoroquinolones (ciprofloxacin) are not recommended first line due to risk of prolonged QT interval, higher rates of C. Difficile and poor pneumococcal activity.
- Doxycycline can cause oesophagitis, which is more likely in bed-bound patients. Ensure doxycycline is taken with food and a full glass of water, and that the patient remains upright for at least an hour after the dose.

### Antibiotic Dosage and Course Length

**For empirical treatment of mild disease:**

<table>
<thead>
<tr>
<th>Antibiotic</th>
<th>Dosage and Course Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxicillin* 1g orally</td>
<td>8-hourly for up to 7 days</td>
</tr>
<tr>
<td>If the patient does not improve despite treatment with amoxicillin after 48 hours, or if Gram-negative organisms are identified by Gram stain of sputum:</td>
<td></td>
</tr>
<tr>
<td>Amoxicillin+clavulanate (875+125m)</td>
<td>12-hourly for up to 7 days</td>
</tr>
<tr>
<td>For patients with hypersensitivity to penicillin:</td>
<td></td>
</tr>
<tr>
<td>Cefuroxime 500mg orally</td>
<td>12-hourly for up to 7 days</td>
</tr>
<tr>
<td>For patients with immediate hypersensitivity to penicillin:</td>
<td></td>
</tr>
<tr>
<td>Doxycycline 100mg orally</td>
<td>12-hourly for up to 7 days</td>
</tr>
</tbody>
</table>

**Respiratory tract infections in aged care: antimicrobial prescribing**

### Antiviral Dosage and Course Length

- The earlier treatment starts, the shorter and less severe the illness. Start within 48 hours (ideally within 24 hours) after onset of symptoms.

<table>
<thead>
<tr>
<th>Antiviral</th>
<th>Dosage and Course Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oseltamivir</td>
<td></td>
</tr>
<tr>
<td>eGFR &gt; 60ml/min</td>
<td>75mg orally 12-hourly for 5 days</td>
</tr>
<tr>
<td>eGFR 30-60ml/min</td>
<td>30mg orally 12-hourly for 5 days</td>
</tr>
<tr>
<td>eGFR 10-30ml/min</td>
<td>75mg orally once daily for 5 days</td>
</tr>
</tbody>
</table>

Ensure that all antibiotic orders document:
- the clinical reason,
- medication name, dose and route of administration
- PLUS the intended duration and any treatment review plan.

### Version 1 correct as of June 2019

**Wardmm medication management**

1800 927 366
info@wardmm.com.au
www.wardmm.com.au