

Guidance for Antibiotic Prescribing in Primary Care

REVIEWED APRIL 2009

STANDING MEDICAL ADVISORY COMMITTEE RECOMMENDATIONS 1998

- No prescribing of antibiotics for coughs and colds
- No prescribing of antibiotics for viral sore throats
- Uncomplicated cystitis: limit to 3 days of antibiotics
- Limit prescribing of antibiotics over the telephone to exceptional cases

Standing Medical Advisory Committee "Path of Least Resistance"

Recommend 3 day courses IF antibiotics prescribed for:

- Uncomplicated cystitis
- Acute Otitis Media
- Acute Sinusitis

- Use British National Formulary to obtain drug doses, contra-indications and side effects
- Antibiotic inappropriate for local or systemic viral infections
- Avoid the use of quinolones such as ciprofloxacin and limit use of cephalosporins to reduce the risk of Clostridium difficile

Acute Sinusitis: uncomplicated

1st Line	2nd Line	3rd Line
No Antibiotic	Amoxicillin or Erythromycin	Tetracyclines or Co-amoxiclav

3 Days

Sore Throat, Pharyngitis, Tonsillitis: uncomplicated

1st Line	2nd Line	3rd Line
No Antibiotic	Phenoxymethylpenicillin or Erythromycin	Consult microbiologist

7 to 10 Days

Antibiotic recommended if one or more of the following:

- History of rheumatic fever
- Scarlet fever
- Pronounced systemic infection
- Immunosuppressed ^D

Community Acquired Pneumonia

1st Line
Amoxicillin or Erythromycin

7 to 10 Days

- Erythromycin (i) should be substituted if no response to amoxicillin (ii) first choice if atypical organism suspected
- If hospital admission required, first dose should be IV or IM ^D

Acute Otitis Media: uncomplicated

1st Line	2nd Line	3rd Line
No Antibiotic	Amoxicillin or Erythromycin	Tetracyclines or Co-amoxiclav

3 Days

Acute Bronchitis

1st Line	2nd Line
No Antibiotic	Amoxicillin or Erythromycin or Tetracycline

5 Days

- No underlying lung disease
- Otherwise healthy adults ^D

Acute Exacerbation of Chronic Obstructive Pulmonary Disease (COPD)

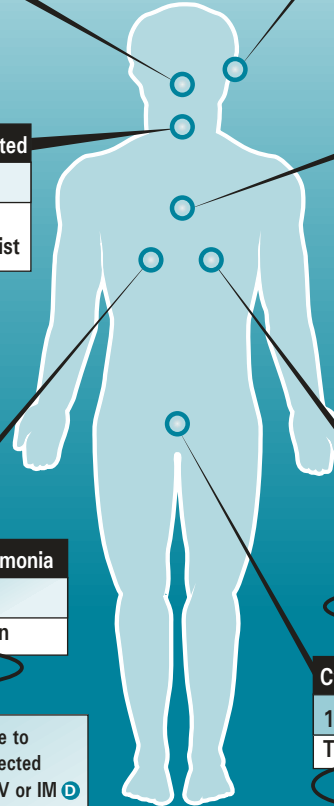
1st Line	2nd Line
Amoxicillin	Tetracyclines or Co-amoxiclav

5 to 10 Days

Cystitis: women, uncomplicated, not pregnant

1st Line	2nd Line
Trimethoprim	Nitrofurantoin or Cefalexin

3 Days



Supporting Evidence

Acute Otitis Media (AOM):

- 60% of children will be pain free 24hrs after presentation regardless of whether they receive antibiotics **A**
- Need to treat 12 children with antibiotics to get pain relief in one additional child at 2 days **A**
- 80% resolve without antibiotic treatment in 3 days **D**
- No effect of antibiotics on complication rates as measured by tympanometry or recurrence **A**

Sore Throat, Pharyngitis, Tonsillitis

- Complications of sore throat are now so rare that an adverse drug reaction from antibiotic therapy is more likely **A**
- To prevent 1 case of AOM, 30 children and 145 adults suffering sore throat must be treated **A**
- Current and previous prescribing for sore throat increases re-attendance **A**
- Throat swabs: have limited value and difficult to interpret because
 - no serological evidence of Strep Infection in most cases of positive culture
 - high asymptomatic carrier rate (20%)- impossible to distinguish between infection and carriers from swab alone **A**

Acute sinusitis:

- 69% resolve spontaneously without antibiotics **A**
- Amoxicillin does not influence clinical course of acute maxillary sinusitis or the frequency of relapses during a 1 year follow up **A**
- No advantage of other antibiotics over amoxicillin **A**
- Doxycycline does not add to effectiveness of decongestive nose drops and steam inhalation in adults **A**

Uncomplicated cystitis:

- Decision to prescribe antibiotics based on history, examination and positive dipstix result for nitrite and/or leucocyte esterase **D**
- If negative urine dipstix, no antibiotic and send urine for culture **D**
- Routine laboratory microscopy, culture and sensitivity analysis in uncomplicated UTI is unnecessary and expensive **D**

Acute bronchitis:

- Antibiotics are of no proven benefit in treating acute bronchitis in otherwise healthy adults **A**
- Viruses most common organism **C**
- Consider if over 60 or underlying chest disease **D**

Acute Exacerbation of Chronic Obstructive Pulmonary Disease (COPD) :

- Clinically significant benefit from antibiotics **D**
- British Thoracic Society recommend antibiotic Rx if any two of dyspnoea, increased sputum volume or increased sputum purulence occurs **D**

Community Acquired Pneumonia (CAP):

- Antibiotic treatment should not be delayed : mortality in Patients > 65 is high **D**
- 90% of admissions with CAP are over 65, 16-40% mortality in this group **C**
- Antibiotic should always include activity against Strep pneumoniae **D**
- Quinolones have poor activity against pneumococci **D**

GRADING OF EVIDENCE

- A** Evidence from at least one RCT
- B** Controlled studies or other experimental studies
- C** Observational or descriptive studies
- D** Expert consensus opinion