

Outpatient Management of Acute Respiratory Tract Infections (ARI)

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ARI Key Messages

Use antibiotics only when indicated in the treatment of ARIs to prevent adverse effects

Make a specific, clinical ARI diagnosis to drive appropriate care

Prescribe antibiotics only for patients who meet clinical diagnostic criteria for pharyngitis or bacterial sinusitis

Provide symptomatic therapies that help patients feel better

Use Penicillin or Penicillin-like antibiotics as the cornerstone of therapy when prescribing antibiotics for pharyngitis and bacterial sinusitis

SHARE treatment decisions for ARI management with patients to improve satisfaction

Patient Satisfaction



Diagnosis



Reassurance



Relief of symptoms

Patients with ARI generally seeking:



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Guideline Review

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Sinusitis

Key Symptoms	Key Clinical Findings	Antibiotic Treatment Recommendations
<p>Nasal obstruction, purulent nasal discharge, facial pain, cough, decreased sense of smell (90-98% viral)</p>	<p>Criteria for Bacterial Sinusitis:</p> <ul style="list-style-type: none">• Persistent and not improving (>10 days)• Worsening (new onset fever, double sickening)• Severe symptoms or febrile (>102°F) with purulent nasal discharge or pain lasting ≥ 3 days	<p>Antibiotics MAY be indicated if clinical criteria for bacterial sinusitis are met</p> <p>Preferred: (treat x5-7 days)</p> <ul style="list-style-type: none">• Augmentin• Amoxicillin <p>Penicillin Allergy:</p> <ul style="list-style-type: none">• Doxycycline• Levofloxacin• Moxifloxacin

Pharyngitis

Key Symptoms	Key Clinical Findings	Antibiotic Treatment Recommendations
Sore throat with or without other upper respiratory symptoms (5-15% bacterial group A <i>Streptococcus</i> infection)	Test for group A <i>Streptococcus</i> if three of the following are present (CENTOR criteria): <ul style="list-style-type: none">• Fever• Swollen cervical lymphadenopathy• Tonsillar exudate• Absence of cough	Antibiotics recommended ONLY if positive group A <i>Streptococcus</i> test or culture Preferred: (treat x10 days) <ul style="list-style-type: none">• Amoxicillin• Penicillin VK Penicillin Allergy: <ul style="list-style-type: none">• Cephalexin• Clindamycin

Uncomplicated Bronchitis

Key Symptoms	Key Clinical Findings	Antibiotic Treatment Recommendations
Cough, possible phlegm production (>90% viral)	Differentiate from severe illness: <i>pneumonia</i> (abnormal vital signs, focal lung consolidation), <i>pertussis</i> (confirmed exposure/positive test), <i>influenza</i> (high fever, myalgias)	Antibiotics NOT recommended; cough duration (3 - 6 weeks) or change in sputum color is not indicative of bacterial infection

Common Cold

Key Symptoms	Key Clinical Findings	Antibiotic Treatment Recommendations
Runny nose, cough, sore throat, nasal congestion	Differentiate from acute bacterial sinusitis	Antibiotics NOT recommended; Symptoms can last up to 14 days

Maintaining patient satisfaction without prescribing an antibiotic

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Provider Tools

Utilize rapid influenza and rapid strep tests to help guide therapy

- **Note:** Rapid strep test is highly accurate

Utilize new patient educational handouts

- **Tip:** Contingency Planning

Focus on symptomatic therapy

- **Tip:** Emphasize antibiotics will NOT shorten duration of symptoms

Educate on concerns surrounding unnecessary antibiotic use

Focus on Symptomatic Therapy

Symptoms	Therapeutic Options
Headache, Pain in Ear/Muscle/Joint	acetaminophen, ibuprofen
Cough	guaifenesin/dextromethorphan, benzonatate
Nasal Congestion	saline nasal spray, fluticasone, oxymetazoline, pseudoephedrine
Rhinorrhea and/or Sneezing	ipratropium nasal, chlorpheniramine, diphenhydramine, cetirizine
Throat Discomfort	chloraseptic throat spray, throat lozenges



Include non-medication therapies as well (warm compresses, humidifier, etc.)

Education on Risks of Antibiotics

Unnecessary prescribing causes downstream consequences



Did you know?

Antibiotics are among the most common drug classes involved in patients presenting to the ED with adverse effects.⁵

Rao GA, et al. Azithromycin and levofloxacin use and increased risk of cardiac arrhythmia and death. Ann Fam Med. 2014 Mar-Apr;12(2):121-7.

Important to Remember

- Macrolide antibiotics are **NOT** recommended as 1st or 2nd line treatment for ARI yet are the second most commonly prescribed antibiotic class in the outpatient setting
- Use penicillin or penicillin-based antibiotics as the cornerstone of therapy

Comments/Questions?



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