

# Respiratory Tract: Acute Bacterial Sinusitis

CLINICAL AND THERAPEUTIC ALGORITHM	RISK FACTORS	RECOMMENDED REGIMENS
<p>1a. Antibiotics are indicated if the patient has <u>ANY</u> of the following:</p> <ul style="list-style-type: none"> <li>Symptoms lasting <math>\geq 10</math> days without clinical improvement</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Severe symptoms at onset lasting <math>\geq 3</math> days [Fever (<math>\geq 102^\circ\text{F}</math>), severe facial pain, or purulent discharge]</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>New onset fever, severe headache, or increase nasal discharge after 5-6 days following initial improvement</li> </ul> <p>1b. If the patient does not meet this criteria likely viral and self-limiting. May provide symptom relief.</p> <ul style="list-style-type: none"> <li>Reduce nasal symptoms: topical or nasal decongestants, intranasal corticosteroids, intranasal saline</li> </ul> <p>2. If no improvement after 3 to 5 days of antibiotic therapy switch to an alternative agent from a different antibiotic class</p>	<p>Presence of Risk Factors for Antibiotic Resistance:</p> <ul style="list-style-type: none"> <li>Age <math>&gt; 65</math></li> <li>Antibiotics within last 30 days</li> <li>Hospitalization within last 5 days</li> <li>Immuno-compromised</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Fever <math>&gt; 102^\circ\text{F}</math> with signs of systemic illness</li> </ul> <p><b>None of the above</b> risk factors for antibiotic resistance</p> <p><b>AND</b></p> <p>No fever or signs of systemic illness</p>	<p><b>Initial Empiric Antibiotic Therapy:</b></p> <p>Amoxicillin/clavulanate PO:</p> <p>CrCl <math>&gt; 30</math> ml/min: 2000/125 mg<sup>‡</sup> Q12H            CrCl 10 – 29 ml/min: 875/125 mg Q12H            CrCl <math>&lt; 10</math> ml/min: 2000/125<sup>‡</sup> mg Q24H</p> <p><b>Alternatives*:</b></p> <p>Moxifloxacin 400 mg PO Q24H</p> <p>Treat for 7 to 10 days</p> <hr/> <p><b>No risk for Antibiotic Resistance:</b></p> <p>Amoxicillin/clavulanate PO:</p> <p>CrCl <math>&gt; 30</math> ml/min: 875/125 mg Q12H            CrCl 10–29 ml/min: 500/125 mg Q12H            CrCl <math>&lt; 10</math> ml/min: 875/125 mg Q24H</p> <p><b>Alternatives*:</b></p> <p>Doxycycline 100 mg PO Q12H</p> <p>Treat for 5 to 7 days</p>

CrCl= creatinine clearance; H= hour(s); PO= by mouth; Q= every

<sup>‡</sup> Pharmacy does not carry amoxicillin/clavulanate 2000/125 mg tablets. Order 875/125 mg tablets of amoxicillin/clavulanate **AND** 1000 mg tablets of amoxicillin (total amoxicillin/clavulanate = 1,875/125 mg per dose).

\*Macrolides, trimethoprim-sulfamethoxazole, and 2nd or 3rd generation cephalosporins are not recommended due to increasing rates of antimicrobial resistance.

## References:

1. Chow AW, Benninger MS, Brook I, et al. IDSA clinical practice guideline for acute bacterial rhinosinusitis in children and adults. *Clin Infect Dis.* 2012; 54:e72.