

## Management of Sinusitis in Adults

### Clinical Practice Guideline

### MedStar Health

### Antibiotic Stewardship

*“These guidelines are provided to assist physicians and other clinicians in making decisions regarding the care of their patients. They are not a substitute for individual judgment brought to each clinical situation by the patient’s primary care provider in collaboration with the patient. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but should be used with the clear understanding that continued research may result in new knowledge and recommendations.”*

#### ADULT PATIENTS (18 years old or older)

1. Antibiotics should not be given for viral rhinosinusitis or sinusitis.
2. Indications for antibiotics include rhinosinusitis symptoms lasting **seven or more days** and **any** of the following:
  - a. Purulent nasal discharge, or
  - b. Maxillary tooth or facial pain, especially unilateral, or
    - \* Note: isolated tooth pain does not necessarily necessitate treatment with antibiotics.
  - c. Unilateral maxillary sinus tenderness, or
  - d. Worsening symptoms after initial improvement (double worsening)
3. Initial antibiotic treatment of acute bacterial sinusitis should be with the most narrow-spectrum agent which is active against the likely pathogens. Options include:
  - a. Low Risk for Resistance: Amoxicillin-clavulanate (either 500 mg/125 mg orally three times daily or 875 mg/125 mg orally twice daily) for five to seven days.
  - b. Higher Risk for Resistance: High dose amoxicillin-clavulanate extended release 2000 mg every 12 hours for five to seven days .
  - c. Penicillin Allergy: Doxycycline 100 mg every 12 hours for five to seven days; Fluoroquinolones (levofloxacin 500 mg daily or moxifloxacin 400 mg daily) for five to seven days.\*
  - d. NOT RECOMMENDED – Macrolides (clarithromycin or azithromycin), trimethoprim-sulfamethoxazole, and second- or third-generation cephalosporins are not recommended for empiric therapy in adults because of high rates of resistance of *S. pneumoniae* (and of *H. influenzae* for trimethoprim-sulfamethoxazole).
4. Patients who fail to respond to initial antibiotic therapy should be re-evaluated to confirm that symptoms remain consistent with acute bacterial sinusitis, to consider alternative diagnoses, and to evaluate for complications of acute sinusitis. If acute bacterial sinusitis remains the working diagnosis, second line treatment options can be prescribed. These include:
  - a. Amoxicillin-clavulanate 2 g/125 mg extended-release tablets orally twice daily for 7-10 days
  - b. Levofloxacin 500 mg orally once daily for 7-10 days
  - c. Moxifloxacin 400 mg orally once daily for 7-10 days

<p><b><u>Initial Approval Date and Reviews:</u></b> Effective 7/15, 6/21/16 , 6/18</p>	<p><b><u>Most Recent Revision and Approval Date:</u></b> Revised 6/2018</p>	<p><b><u>Next Scheduled Review Date:</u></b> 6/2020</p> <p>Condition: Sinusitis Adult</p>
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- d. For penicillin-allergic patients, options for second-line therapy include:
- i. Doxycycline 100 mg orally twice daily or 200 mg orally daily for 7-10 days
  - ii. Levofloxacin 500 mg orally once daily for 7-10 days
  - iii. Moxifloxacin 400 mg orally once daily for 7-10 days

**\*The U.S. Food and Drug Administration is advising that the serious side effects associated with fluoroquinolone antibacterial drugs generally outweigh the benefits for patients with sinusitis, bronchitis, and uncomplicated urinary tract infections who have other treatment options. For patients with these conditions, fluoroquinolone should be reserved for those who do not have alternative treatment options.**  
<http://www.fda.gov/Drugs/DrugSafety/ucm500143.htm> (5/12/2016)

## PATIENT EDUCATION

Choosing wisely: <http://www.choosingwisely.org/patient-resources/treating-sinus-problems-aaaai/>

## DEFINITIONS

Antimicrobial stewardship refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration. Antimicrobial stewards seek to achieve optimal clinical outcomes related to antimicrobial use, minimize toxicity and other adverse events, reduce the costs of health care for infections, and limit the selection for antimicrobial resistant strains. - See more at: [http://www.idsociety.org/stewardship\\_policy/#sthash.SM1baBaC.dpuf](http://www.idsociety.org/stewardship_policy/#sthash.SM1baBaC.dpuf)

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