

Clinical question	How effective are antibiotics in treating acute sinusitis?
Bottom line	In a primary care setting, antibiotics have a small treatment effect in patients with uncomplicated acute sinusitis with symptoms for more than 7 days (average improvement rate of 90% in antibiotic groups and 80% in the control groups; NNT* 10). The review contains trials of treatment for clinically diagnosed acute sinusitis, whether or not confirmed by radiography or bacterial culture. Drug therapies reviewed were antibiotic versus control or comparisons between different antibiotic classes. None of the antibiotic preparations (amoxycillin, amoxycillin- clavulanate, azithromycin, cephalosporins, faropenem, fluoroquinolones, macrolides, oxymetazoline, streptogramin and tetracyclines) was superior to each other. *NNT = number needed to treat to benefit one individual.
Caveat	Eighty per cent of participants treated without antibiotics improved within 2 weeks. Clinicians need to weigh the small benefits of antibiotic treatment against the potential for adverse effects at both the individual level (diarrhoea, abdominal pain, vomiting and skin rashes) and general population level (antibiotic resistance).
Context C	Sinusitis accounts for 15–21% of all antibiotic prescriptions for adults in outpatient care. Treatment options include antibiotics, decongestants, steroid drops or sprays, mucolytics, antihistamines, or sinus puncture and lavage.
Cochrane Systematic Review	Ahovuo-Saloranta A et al. Antibiotics for acute maxillary sinusitis. Cochrane Reviews 2008, Issue 2. Article No. CD000243. DOI: 10.1002/14651858. CD000243. pub2. This review

Antibiotics have a small treatment effect in acute sinusitis

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PEARLS 108, October 2008, written by Brian R McAvoy



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