

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

March 2022 • Vol. 19, No. 3

The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 38. No. 3

PEDIATRICS

You'll see a shift toward SHORTER courses of antibiotics in children with community-acquired pneumonia.

Pneumonia is viral in over 7 in 10 kids.

But when a bacterial infection is suspected, 10 days of an antibiotic is often given...based on durations used in older studies.

Now mounting evidence suggests 5 days is enough...similar to adults. Some data even support 3 days, but it's not enough to change practice.

Suggest treating for 5 days when a child with pneumonia needs an antibiotic. It may take time for guidelines to catch up to the data.

Generally recommend amoxicillin 90 mg/kg/day divided bid...to cover *S. pneumoniae*. This bug doesn't produce beta-lactamase...so amoxicillin/clavulanate isn't more effective AND causes more diarrhea.

For kids with a NONsevere penicillin allergy, such as a non-itchy rash, suggest a cephalosporin with low cross-reactivity risk...such as cefdinir, cefpodoxime, or cefuroxime.

Reserve clindamycin or levofloxacin for kids with a SEVERE penicillin allergy (hives, angioedema, etc).

Save macrolides (azithromycin, etc) as an add-on if atypicals are suspected...but these bugs aren't likely under age 5. In general, don't suggest a macrolide alone...*S. pneumoniae* resistance is about 50%.

Educate to contact the prescriber if kids don't improve in 2 to 3 days. But counsel that cough may linger for several weeks.

Recommend acetaminophen or ibuprofen for fever or pain.

For cough, suggest nondrug measures...cool-mist humidifiers, up to 2 tsp of honey as needed in kids over age 1, etc. But steer away from OTC antitussives...they lack good data and may be harmful.

Review our chart, *Pediatric Community-Acquired Pneumonia: Empiric Treatment*, for more on dosing and alternative antibiotics.

See our comprehensive *RxAdvanced: Antimicrobial Stewardship* training program to hone your expertise in appropriate antibiotic use.

(For more on this topic, see Clinical Resource #380306 at [PharmacistsLetter.com](https://www.pharmacistsletter.com).)

Williams DJ, Creech CB, Walter EB, et al. Short- vs Standard-Course Outpatient Antibiotic Therapy for Community-Acquired Pneumonia in Children: The SCOUT-CAP Randomized Clinical Trial. *JAMA Pediatr.* 2022 Jan 18:e215547. doi: 10.1001/jamapediatrics.2021.5547.

See LEADER NOTES for answers to discussion questions.

DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. What is known about treating community acquired pneumonia (CAP) in children?

ANALYSIS OF NEW GUIDELINE

2. What type of study was this? How were the patients selected for inclusion?

3. How were the study groups defined?

4. How were the outcomes evaluated?

See [LEADER NOTES](#) for answers to discussion questions.

5. What were the outcomes of this study?

6. What were the strengths and weaknesses of this study?

7. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

8. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

LK is a 7-year-old male whose mother brings him in for evaluation of fever, cough, and congestion that's been present for a week. His highest temperature was 102.0°F yesterday. Mom reports fever is alleviated with acetaminophen. She notes LK is fatigued but otherwise acting normally when afebrile.

See [LEADER NOTES](#) for answers to discussion questions.

On the day of his clinic visit, LK has normal vital signs and is afebrile. He appears well, though congested, and is coughing intermittently during the visit. Your physical examination is otherwise normal.

9. Based on your current clinical evaluation, how do you initially treat LK?

You provide the above general guidelines to LK's mother and recommend a follow-up visit in 48 hours if LK doesn't show improvement. Two days later, his mother brings LK back in for persistent symptoms, noting his cough is worse, and he is not as playful as normal. During this visit, LK has a fever of 101.0° F, but vitals are otherwise normal. On auscultation of the lungs, you hear abnormal breath sounds on the right lower lobe and a follow-up chest x-ray reveals a small right lower lobe infiltrate.

Due to lack of clinical improvement, you now decide LK should begin an antibiotic for community-acquired pneumonia (CAP). LK has no known drug allergies.

10. What antibiotic should you start for LK, and for what length of treatment?

You start LK on amoxicillin for 5 days and schedule him for a follow-up in 1 week. At the follow-up visit, LK's mother reports he has remained afebrile and is back to his baseline state of health and activity.

11. How would you have managed LK if he had a penicillin allergy?

See [LEADER NOTES](#) for answers to discussion questions.

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Additional Pharmacist's Letter Resources available at [PharmacistsLetter.com](https://www.pharmacistsletter.com)

Toolbox, Preventing and Treating Community-Acquired Pneumonia. *Pharmacist's Letter/Prescriber's Letter*. December 2019.

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Chart, Comparison of Pneumococcal Vaccines. *Pharmacist's Letter/Prescriber's Letter*. December 2021.

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See **LEADER NOTES** for answers to discussion questions.