

# Judicious Use of Antibiotics

## Data Collection Tool – Acute Streptococcal Pharyngitis

**Directions:**

**Pull 10 or more charts of patients:**

- 1) Seen by your practice more than 5 days ago, and;
- 2) Diagnosed with Acute Streptococcal Pharyngitis (strep throat), and;
- 3) Treated with an antibiotic
- 4) Exclude patients with a previous diagnosis of strep in the last 3 months

### Questions for Patients Diagnosed with Acute Streptococcal Pharyngitis

1. Was this patient seen for an office sick visit that resulted in the diagnosis of acute streptococcal pharyngitis (strep throat)?

Yes       No, the patient was not seen in the office

2. Were one or more of the following signs or symptoms listed below present upon the examination?

Yes       No

<ul style="list-style-type: none"> <li>• conjunctivitis</li> <li>• coryza</li> <li>• cough</li> <li>• diarrhea</li> </ul>	<ul style="list-style-type: none"> <li>• hoarseness</li> <li>• mouth ulcers</li> <li>• maculopapular rash</li> </ul>
---	--

3. Is there documentation in the medical record that one or more of the following symptoms, signs, or features were present upon the examination?

Yes       No

<ul style="list-style-type: none"> <li>• tonsillopharyngeal erythema</li> <li>• patchy tonsillopharyngeal exudates</li> <li>• palatal petechiae</li> <li>• sudden onset of sore throat and fever</li> </ul>	<ul style="list-style-type: none"> <li>• tender cervical adenopathy</li> <li>• scarlatiniform rash</li> <li>• swollen red uvula</li> </ul>
---	--

4. Was a rapid antigen detection test (RADT) performed to confirm the diagnosis?

Yes       No       N/A, throat culture performed

If Yes, to Question #4 (RADT ordered), *Continue*

If No, to Question #4 (RADT not ordered) *Skip to Question #5*

If N/A, throat culture performed, to Question #4, *Skip to Question #4c*

4a. If yes, to Question #4 (RADT performed), what were the results?

Positive RADT     Negative RADT

If Positive to Question #4a (Positive RADT), *Skip to Question #5*

If Negative to Question #4a (Negative RADT), *Continue*

4b. If Negative to Question #4a (RADT result was negative), was a throat culture performed?

Yes       No

If Yes, to Question 4b (throat culture performed), *Continue*

If No, to Question 4b (No throat culture ordered), *Skip to Question #5*

4c: If N/A to Question #4 or Yes, to Question #4b (throat culture performed), what were the results?

Positive throat culture    Negative throat culture

5. Was this patient treated with penicillin or amoxicillin (including injected penicillin)?

Yes    No    N/A, Previous [severe allergic reaction](#) or [non-severe allergic reaction](#)<sup>†</sup>

If Yes, (patient treated with penicillin or amoxicillin), *Continue*

If No, (patient NOT treated with penicillin or amoxicillin), *Skip to Question # 7*

If N/A, previous [severe allergic reaction](#) or [non-severe allergic reaction](#)<sup>†</sup>, *Skip to Question # 6*

5a. If yes, to Question #5 (patient treated with penicillin or amoxicillin), was the penicillin or amoxicillin prescribed for a duration of 10 days?

Yes    No    N/A, patient treated with injection of penicillin

All responses, *Skip to Question # 8*

6. If N/A, (previous severe or non-severe allergic reaction to penicillin or amoxicillin) to question #5, was the patient treated with any of the following antibiotics?

Yes    No

Preferred agents in chronic carriers of group A streptococci	
<ul style="list-style-type: none"> <li>amoxicillin-clavulanate</li> </ul>	
Preferred agents for penicillin-allergic individuals: Should be considered first	Non-preferred agents for penicillin-allergic individuals: Should be considered secondarily
<ul style="list-style-type: none"> <li><b>narrow-spectrum *cephalosporins:</b> <ul style="list-style-type: none"> <li>cephalosporin</li> <li>cefadroxil</li> <li>cephalexin</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>broad-spectrum *cephalosporins:</b> <ul style="list-style-type: none"> <li>cefaclor</li> <li>cefuroxime</li> <li>cefixime</li> <li>cefdinir</li> <li>cefpodoxime</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>clindamycin</li> </ul>	<p>*Some penicillin-allergic persons (up to 10%) are also allergic to cephalosporins, and these agents should not be used in patients with immediate (anaphylactic-type) hypersensitivity to penicillin</p>
<ul style="list-style-type: none"> <li><b>oral macrolides:</b> <ul style="list-style-type: none"> <li>erythromycin</li> <li>clarithromycin</li> <li>azalide</li> <li>azithromycin</li> </ul> </li> </ul>	

If Yes, (patient treated with one of the following antibiotics), *Skip to Question # 8*

If No, (patient NOT treated any of the following antibiotics), *Continue*

# Judicious Use of Antibiotics

7. If **No** to Question #6 (patient not treated with listed antibiotic), was the patient treated with any of the following antibiotics?

Yes    No

Limited activity or needlessly broad spectrum and should <b>not</b> be used
<ul style="list-style-type: none"> <li>• <b>Fluoroquinolones:</b> <ul style="list-style-type: none"> <li>○ ciprofloxacin</li> <li>○ levofloxacin</li> <li>○ moxifloxacin</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Sulfonamides:</b> <ul style="list-style-type: none"> <li>○ trimethoprim-sulfamethoxazole</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• <b>Tetracycline</b> <ul style="list-style-type: none"> <li>○ doxycycline</li> </ul> </li> </ul>

8. Did any provider in the practice discuss and document the following risks of antibiotic therapy with the patient/family?

Yes    No

Should always be discussed:	Should be discussed if patient/family has concerns:
<ul style="list-style-type: none"> <li>• Side effects</li> <li>• Allergic reaction</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Antibiotic resistance</a>*†</li> </ul> <p>†<b>NOTE:</b> A clinical GAS isolate resistant to penicillin or cephalosporin never has been documented.<sup>1</sup></p>

\* †Definitions and references available in the Appendix

## Appendix

### Non-severe and severe allergic reactions:

- **Non-severe** symptoms include hives or pruritic (itchy) rashes.
- **Severe** symptoms include anaphylaxis, angioedema, throat tightening, wheezing plus shock, airway compromise, or cardiovascular collapse. Cardiac collapse requires intervention (eg epinephrine, corticosteroids, vasopressors).

Note: Side effects such as vomiting, abdominal pain, and diarrhea are *non-allergic*.

**Antibiotic Resistance** - Overuse and/or inappropriate use of antibiotics can result in antibiotics losing the ability to treat bacterial infections

<sup>†</sup>**NOTE:** A clinical GAS isolate resistant to penicillin or cephalosporin never has been documented.<sup>1</sup>

<sup>1</sup>American Academy of Pediatrics. *Red Book: 2012 Report of the Committee on Infectious Diseases*. Section 3: *Summaries of Infectious Diseases, Group A Streptococcal Infections*. 668-680. Pickering LK, ed. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2012.

**Reference:** [Clinical Practice Guide for Diagnosis and Management of Group A Streptococcal Pharyngitis: 2012 Update by the Infectious Diseases Society of America](#). Shulman S. T., Bisno, A.L., Clegg, H.W. et al. 2012.