





# Algorithm for the Management of Children Greater than 1 month old or with Sickle Cell Disease and/or Asplenia with Fever or Acute Illness

Fever	
38° C tympanic/oral OR 37.8° C axillary or greater 1 hour apart or 38.3° C tympanic/oral or greater	Temperature taken <b>at home</b> MUST be considered a true temperature

Immediate Assessment (ABCs)	
Source of infection: ?meningitis, AOM, osteomyelitis, etc.	Look for co-morbidities: splenic sequestration, aplastic crisis, etc.

### Appropriate cultures + Labs

Administer antibiotics within 1 hour of arrival

Does patient have clinical signs of meningitis?

YES

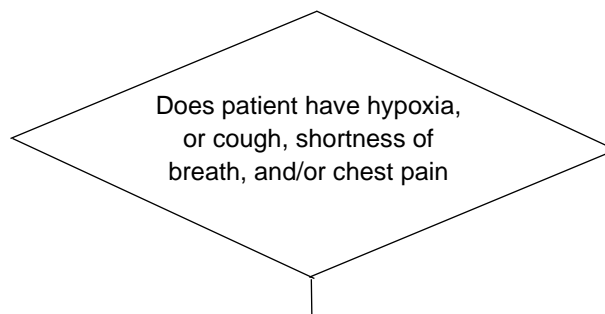
Perform Lumbar Puncture if clinically appropriate, do not delay antibiotics  
Antibiotics: cefTRIAxone (meningitic dosing) + Vancomycin

NO

cefTRIAxone (non-meningitic dosing)

If patient greater than 5 years with suspected atypical pneumonia, add clarithromycin

Discuss with on-call pediatric hematologist-oncologist



### Consider Acute Chest Syndrome

Maintain oxygen saturation over 94%	Chest X-ray (AP + Lateral)	Avoid excessive hydration (75% maintenance IV Fluids)
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Usual organisms include: *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Neisseria meningitidis*, *Salmonella* spp, and *Escherichia coli*

### Admission Criteria (list is not exclusive)

Patient Factors	Environmental	Clinical	Investigations
<ul style="list-style-type: none"> <li>Age less than 1 year</li> <li>Prophylaxis indicated but patient not compliant</li> <li>History of invasive pneumococcal infection</li> <li>Patient on chronic transfusion therapy for stroke</li> </ul>	<ul style="list-style-type: none"> <li>No reliable method of contact</li> <li>Lives more than 45 minutes away from nearest ED</li> <li>Unable to return in 12 to 24 hours for reassessment</li> </ul>	<ul style="list-style-type: none"> <li>Temperature greater than 39.5° C</li> <li>Dehydration</li> <li>Abnormal vital signs</li> <li>Toxic appearing</li> <li>Signs of meningitis</li> <li>Suspected <b>acute chest syndrome</b></li> <li>Any concerning features</li> </ul>	<ul style="list-style-type: none"> <li>WCB greater than <math>30 \times 10^9/L</math></li> <li>ANC less than <math>0.5 \times 10^9/L</math></li> <li>Hgb less than 60 g/L</li> <li>Plt less than <math>100 \times 10^9/L</math></li> <li>Urinalysis positive for blood, nitrates, or leukocyte esterase</li> <li>Infiltrates on chest Xray</li> </ul>

- If patient has history of penicillin allergy (including anaphylaxis to penicillin), IV cefTRIAxone can still be used safely.
  - Due to the small risk of reaction, observe the patient
- If patient has history of cefTRIAxone allergy or reactions, consult with patient's hematologist/oncologist and/or refer to patient's chart if a pre-made plan is in place