

These guidelines are designed to assist clinicians and are not intended to supplant good clinical judgement or to establish a protocol for all patients with this condition.

## **MANAGEMENT OF FEVER $\geq 38^{\circ}\text{C}$ (100.4F) IN INFANTS 0-90 DAYS OLD**

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## **Introduction**

This guideline was written to address the febrile child age 0-90 days. For children under 28 days old, this includes all febrile infants. Multiple articles have shown that clinical evaluation alone in the infant under 28 days of age is inadequate to reliably exclude serious bacterial infection (1). In one study two thirds of infants with bacterial diseases appeared well to the examining attending pediatrician (2).

For infants 61-90 days old, only infants who have fever without a source are included in the guideline. In these older infants 'low risk criteria' are used to identify infants who can be treated safely as outpatients and without antibiotics (1). In the older infant, a lumbar puncture is needed if empiric antibiotics are to be given to avoid missing aseptic meningitis or creating a partially treated meningitis (3).

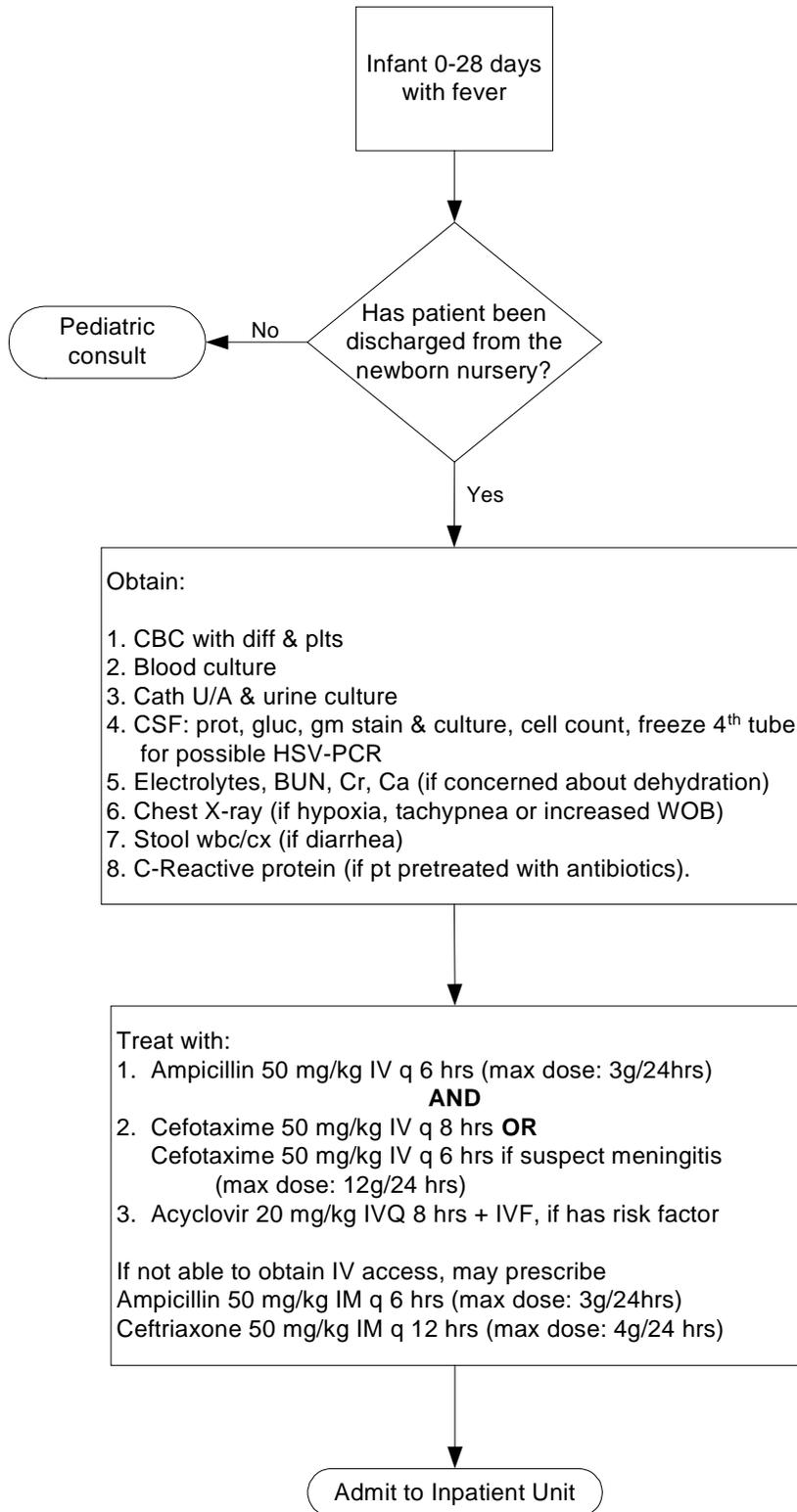
Geographic division was made removing infants from Bethel from the low risk category. This is due to the 10 times higher rate of pneumococcal disease in these areas when compared to the contiguous US. Of note, the remainder of Alaska has a lower incidence than these areas, but is still 4 times higher than the contiguous US (4).

Children with otitis media area also removed from the low risk category. Approximately 3% of febrile young children with otitis media will have bacteremia (5).

Although the majority of these infants will not have serious bacterial infections, studies indicate that up to approximately 10% of febrile infants 1-2 months of age and 13% of febrile infants <1 month of age will have bacterial disease. Bacteremia is found in 2-3% of febrile infants <2 months of age. Urinary tract infections account for 1/3 of all bacterial disease in febrile infants <3 months of age (3). This guideline is designed to identify children most at risk for serious bacterial illness and prevent the rare but severe morbidity and mortality associated with these illnesses.

# Alaska Native Statewide Clinical Guideline

## Management of Fever $\geq 38\text{C}$ (100.4F) in Infants 0-28 Days



### Risk Factors for Herpes Simplex Virus (HSV) Infection

#### History

- Maternal or Paternal Hx of HSV, or known exposure to other HSV infected persons (including “cold sores”).
- Baby previously treated for HSV.
- Maternal HX of STDs or unexplained fever at delivery.

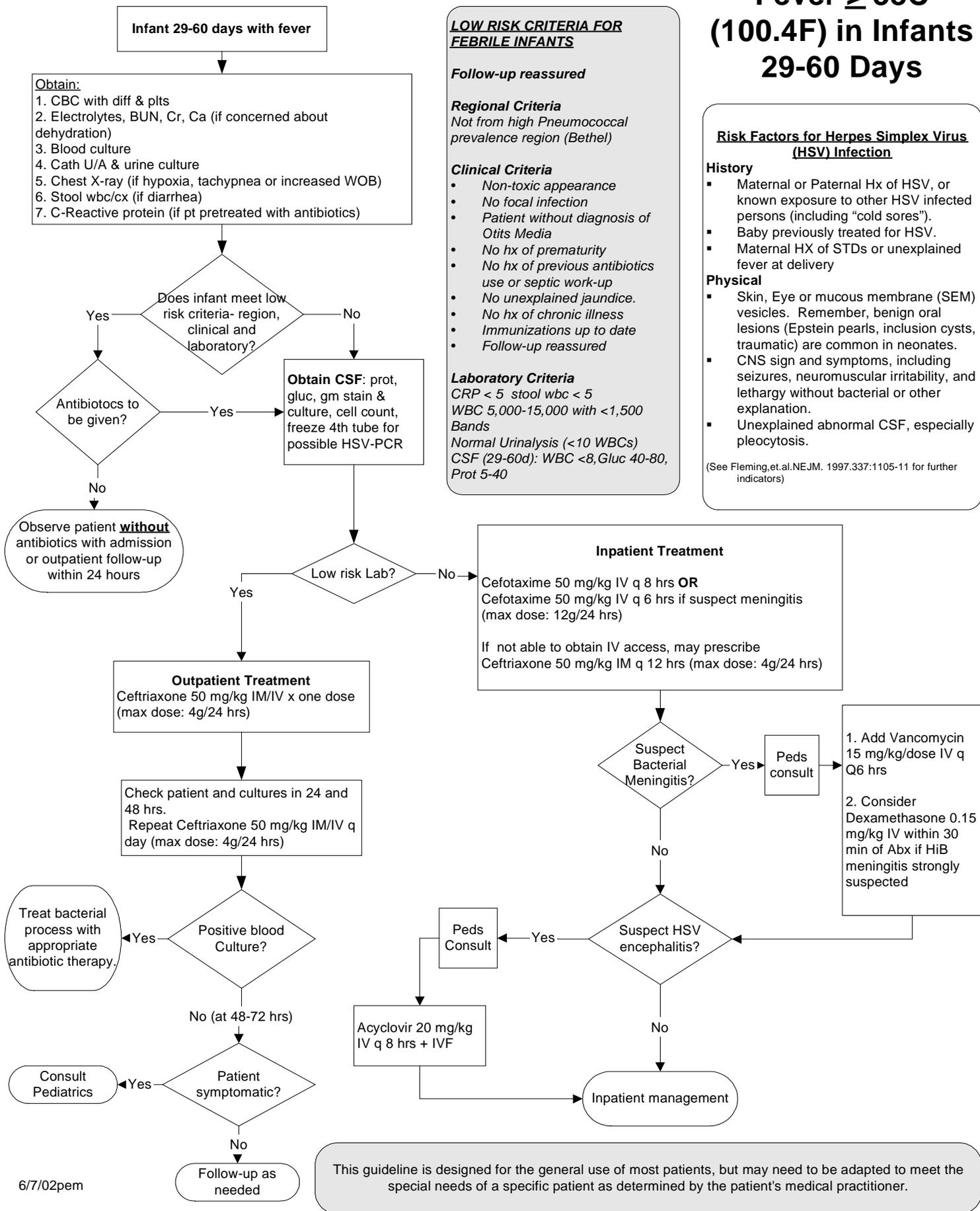
(See Fleming, et.al. NEJM. 1997.337:1105-11 for further indicators)

#### Physical

- Skin, Eye or mucous membrane (SEM) vesicles. Remember, benign oral lesions (Epstein pearls, inclusion cysts, traumatic) are common in neonates.
- CNS signs and symptoms, including seizures, neuromuscular irritability, and lethargy without bacterial or other explanation.
- Unexplained abnormal CSF, especially pleocytosis.

# Alaska Native Statewide Clinical Guideline

# Management of Fever $\geq 38\text{C}$ (100.4F) in Infants 29-60 Days



**LOW RISK CRITERIA FOR FEBRILE INFANTS**

**Follow-up reassured**

**Regional Criteria**  
Not from high Pneumococcal prevalence region (Bethel)

**Clinical Criteria**

- Non-toxic appearance
- No focal infection
- Patient without diagnosis of Otitis Media
- No hx of prematurity
- No hx of previous antibiotics use or septic work-up
- No unexplained jaundice.
- No hx of chronic illness
- Immunizations up to date
- Follow-up reassured

**Laboratory Criteria**  
CRP < 5 stool wbc < 5  
WBC 5,000-15,000 with <1,500 Bands  
Normal Urinalysis (<10 WBCs)  
CSF (29-60d): WBC <8, Gluc 40-80, Prot 5-40

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**History**

- Maternal or Paternal Hx of HSV, or known exposure to other HSV infected persons (including "cold sores").
- Baby previously treated for HSV.
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**Physical**

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- Unexplained abnormal CSF, especially pleocytosis.

(See Fleming, et al. NEJM. 1997.337:1105-11 for further indicators)

This guideline is designed for the general use of most patients, but may need to be adapted to meet the special needs of a specific patient as determined by the patient's medical practitioner.

# Alaska Native Statewide Clinical Guideline

## Management of Fever $\geq 38\text{C}$ (100.4F) in Infants 61-90 Days

### LOW RISK CRITERIA FOR FEBRILE INFANTS

#### Follow-up reassured

#### Regional Criteria

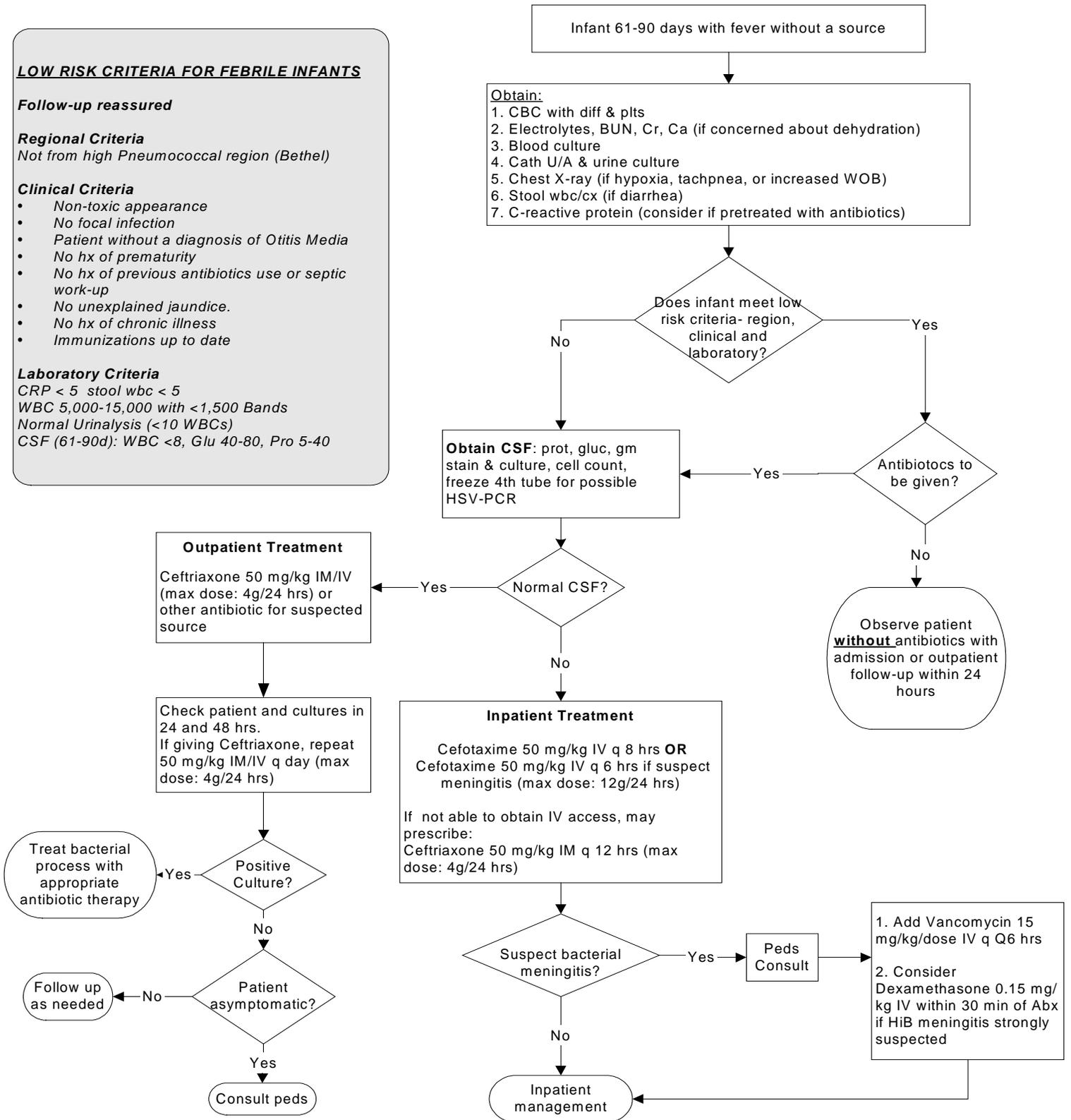
Not from high Pneumococcal region (Bethel)

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- No focal infection
- Patient without a diagnosis of Otitis Media
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- No hx of previous antibiotics use or septic work-up
- No unexplained jaundice.
- No hx of chronic illness
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#### Laboratory Criteria

CRP < 5 stool wbc < 5  
 WBC 5,000-15,000 with <1,500 Bands  
 Normal Urinalysis (<10 WBCs)  
 CSF (61-90d): WBC <8, Glu 40-80, Pro 5-40



This guideline is designed for the general use of most patients, but may need to be adapted to meet the special needs of a specific patient as determined by the patient's medical practitioner.

6/7/02pem

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