

# Clinical Guideline

## Neonatal Fever

 This guideline should not replace clinical judgment.

Pediatric Emergency & Hospital Medicine  
Febrile infant, 1-28 DAYS OF AGE

Fever  $\geq 38^{\circ}\text{C}/100.4^{\circ}\text{F}$  or hypothermia  
 $< 36^{\circ}\text{C}/96.8^{\circ}\text{F}$  in patients 1-28 days of age

### Full Diagnostic Testing

- UA (by microscopy)
- Urine culture (by cath)
- CBC/Diff smear
- Consider AST/ALT
- Blood culture
- CSF studies with culture (defer if unstable)
- CXR IF with concern for pneumonia
- Viral studies - perform IF:
  - Resp Pathogen Direct Testing IF with respiratory signs/symptoms
  - HSV studies IF with concern for HSV and/or with CSF pleocytosis, seizures, etc. (see Box **A**)
  - Enterovirus PCR on blood and CSF IF with CSF pleocytosis, or June through November)
- Stool culture if with diarrhea

### Antibiotic Regimen: Goal within one hour of initial evaluation

- Ampicillin
- AND
- Gentamicin OR cefotaxime

### If suspect bacterial meningitis or with CSF pleocytosis\*:

- Always add/include cefotaxime
- May consider vancomycin if high risk for *S. aureus*

\*Definition of CSF Pleocytosis?  
1-28 days: CSF WBC  $\geq 18/\text{mm}^3$

### If have CSF pleocytosis OR grossly bloody tap ( $>10,000$ RBC) OR high suspicion for HSV OR abnormal neurological exam, ADD:

- Acyclovir

Admit

### If any one of the following, will go off algorithm:

- Evidence of focal infection
- Known immunodeficiency or cancer
- Patients with central venous catheters or VP shunts
- Meeting criteria for septic shock or severe sepsis, OR if critically ill-appearing

\*\*Consider presumptive testing and treatment if under 3 weeks of age\*\*

### **A** Test and treat for HSV if ANY ONE of the following:

1. Suspected HSV infection
2. Severely ill
3. Vesicular lesions
4. Seizure
5. CSF pleocytosis
6. Elevated transaminases/hepatitis
7. Thrombocytopenia
8. Postnatal HSV exposure

### Send:

- HSV PCR in CSF and blood
- HSV PCR of vesicles
- HSV culture of conjunctiva, nasopharynx, and anus

### Treat:

Acyclovir

### DISCHARGE CRITERIA:


$\leq 28$  days of age — may consider discharge at 36 hours if meets all criteria:

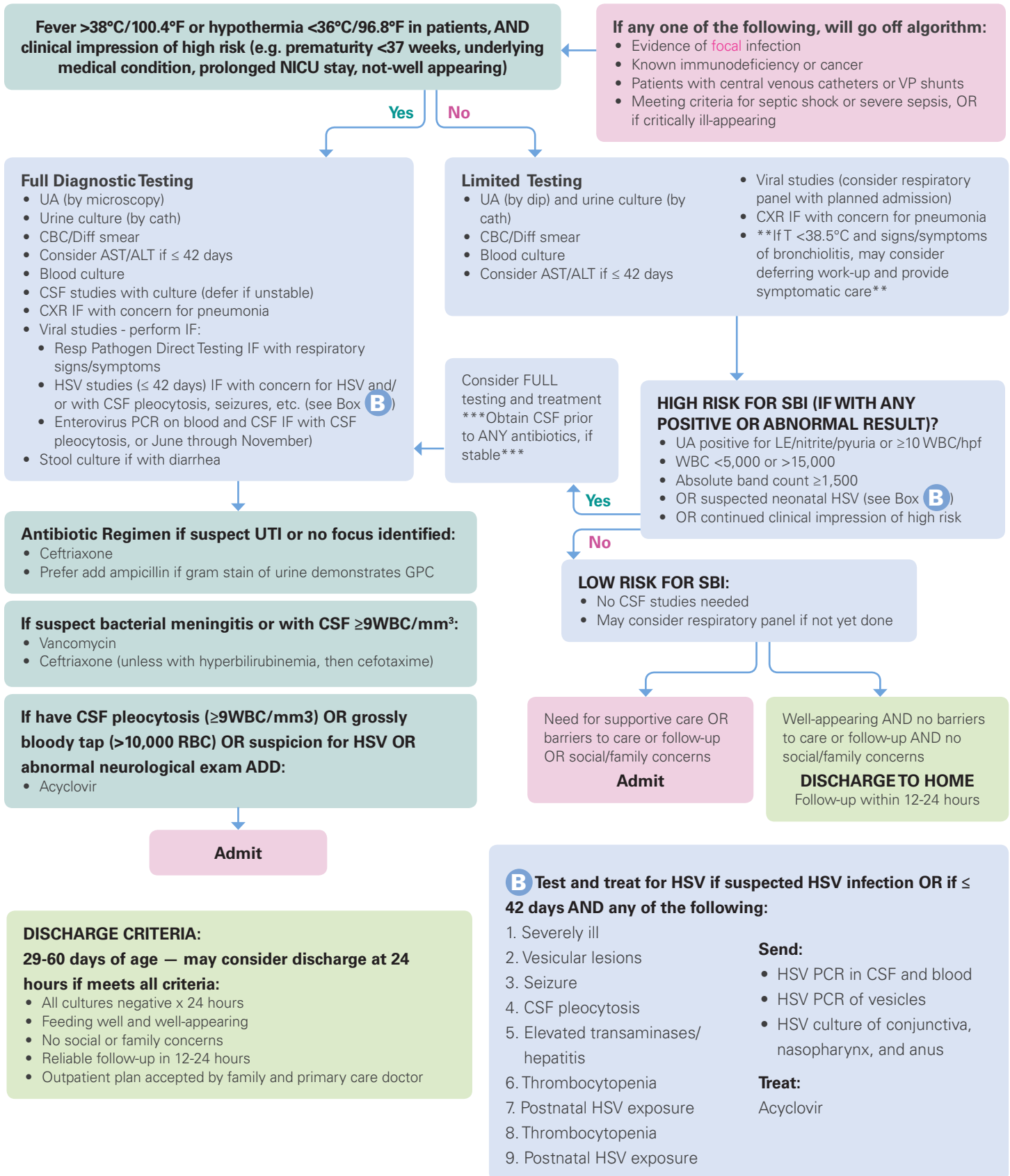
- Blood and urine cultures negative at 36 hours, CSF cultures negative for two consecutive mornings, CSF HSV PCR negative
- Feeding well and well-appearing
- No social or family concerns
- Reliable follow-up in 12-24 hours
- Outpatient plan accepted by family and primary care doctor

# Neonatal Fever

## Pediatric Emergency & Hospital Medicine

### Febrile infant, 29-60 days of age

 This guideline should not replace clinical judgement



# Neonatal Fever Guideline

## Executive Summary

### Children's Hospital of Richmond at VCU Neonatal Fever Workgroup

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### Approved (August 2018)

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### References

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# Neonatal Fever Guideline

## Executive Summary

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*Retrieval website:* **<http://www.chrichmond.org/clinical-pathway-neonatalfever>**

*Example:*

Children's Hospital of Richmond at VCU, Tseng A, Silverman J, Muñoz J. Neonatal Fever Guideline. Available from: <http://www.chrichmond.org/clinicalguideline-neonatalfever>