Guideline: Pediatric Febrile Infant 0-60 days, Inpatient

Last updated: 9/29/23

Clinical algorithm:

Patient presents to ED with Temperature $\geq 38.0$ or $< 36.0$

For infants 0-28 days see:

Infant 0-28 Days

For infants 29-60 days see:

Infant 29-60 Days
Clinical guideline summary

CLINICAL GUIDELINE NAME: Febrile Neonatal 0-60 days

PATIENT POPULATION AND DIAGNOSIS: Infants ≤ 60 Days

APPLICABLE TO: Helen DeVos Children’s Hospital, SH Regional Hospitals

BRIEF DESCRIPTION: This clinical practice guideline applies to the initial evaluation and management of infants less than 60 days with fever.

TEAM LEADER(S): Erica Michiels, Andrea Hadley, Rosey Olivero, and Nicole Kalinowski

OWNING EXPERT IMPROVEMENT TEAM (EIT): Inpatient Pediatric Clinical Practice EIT

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Children’s Health CPC

CPC APPROVAL DATE: 6/17/2021

OTHER TEAM(S) IMPACTED (Example: other CPCs, anesthesia, nursing, radiology, etc.): Nursing, Pharmacy, Infectious disease

IMPLEMENTATION DATE: 6/18/2021

LAST REVISED: 1/17/2022

FOR MORE INFORMATION, CONTACT: Erica Michiels
Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

Infant 0-28 Days

Febrile Neonatal Guideline 0-28 Days

Measured temperature at home or in the ED ≥ 38.0 or < 36.0

BOX 1. Pediatric Assessment Triangle
1 or more findings is ill-appearing:

BOX 2. Antimicrobial Therapy 0-28 days
Meningitis doses are used initially

*Not ill appearing | Ill appearing or CSF pleocytosis

Ampicillin | Ampicillin
Gentamicin | Vancomycin
Consider Acyclovir | Acyclovir

*CSF pleocytosis for pts 0-28 days WBC >18

BOX 3: Bacterial Infection Checklist:
If “yes” to any questions below, patient is high risk for bacterial infection:
• Born less than 37 weeks gestation
• Prior hospitalization or NICU stay
• Chronic medical problems
• Systemic antibiotics in last 72 hours
• WBC <5,000 or >15,000
• UA+ for nitrates, leukocytes and WBC >5
• PCT >0.5ng/mL
• Bands > 1500
• Infiltrate on CXR

BOX 4: HSV Checklist:
If “yes” to any questions below, obtain CSF HSV PCR and viral culture of vesicle, if present:
• < 14 days
• Prematurity
• Maternal hx of genital HSV
• ALT > 50
• Seizure at home
• Ill appearance
• Vesicular rash
• Thrombocytopenia
• Pleocytosis

BOX 5: LP CSF Studies:
• CSF Culture
• Cell Count
• Glucose
• Proteins
• Consider HSV PCR
• Consider Enterovirus POC
• If limited fluid, prioritize culture.

BOX 6. Duration of Treatment/Hospitalization
*If empiric antibiotics are initiated, discontinue antibiotics within 24-36 hours if culture remains negative and discharge the infant by 24-36 hours if discharge criteria are met and appropriate follow-up is arranged.
# Febrile Neonatal Guideline 29–60 Days

**Febrile Neonatal Guideline 29–60 Days**

- **29-60 days old Minimally ESI Level 2**

<table>
<thead>
<tr>
<th>Order:</th>
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<tbody>
<tr>
<td>CBC w/diff</td>
</tr>
<tr>
<td>CMP</td>
</tr>
<tr>
<td>Blood Culture</td>
</tr>
<tr>
<td>UA &amp; Urine Culture</td>
</tr>
<tr>
<td>PCT level</td>
</tr>
<tr>
<td>COVID Testing</td>
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</tbody>
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**Order if Signs/Symptoms:**
- Respiratory Viral Testing
- CXR
- Stool studies

**Complete Checklists:**
- Bacterial infection (BOX 3)
- HSV up to 42 days (BOX 4)

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**29-60 days old**

- **Minimally ESI Level 2**

**Order:**
- CBC w/diff
- CMP
- Blood Culture
- UA & Urine Culture
- PCT level
- COVID Testing

**Order if Signs/Symptoms:**
- Respiratory Viral Testing
- CXR
- Stool studies

**Complete Checklists:**
- Bacterial infection (BOX 3)
- HSV up to 42 days (BOX 4)

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**ill-appearing? (BOX 1)**

**NO**

**YES**

**Normal inflammatory markers?**

**YES**

**NO**

**Perform LP (BOX 5)**

**Give ABX (BOX 2)**

**Admit Patient**

**SEE BOX 6**

**ill-appearing? (BOX 1)**

**NO**

**YES**

**Positive UA?**

**YES**

**NO**

**High risk for bacterial infection?**

**YES**

**NO**

**Coordinated follow up plan established?**

**YES**

**NO**

**NO LP**

**Give ABX (BOX 2)**

**Admit Patient**

**SEE BOX 6**

**NO LP**

**NO ABX**

**Discharge Patient**

**BOX 6. Duration of Treatment/Hospitalization**

If empiric antibiotics are initiated, discontinue antibiotics within 24-36 hours if culture remains negative and discharge the infant by 24-36 hours if discharge criteria are met and appropriate follow-up is arranged.

**BOX 1. Pediatric Assessment Triangle**

1 or more findings is ill-appearing:
- Tense-rect靱性
- Cyanosis
- Convulsions

**BOX 2. Antimicrobial Therapy 29-60 days**

Meningitis doses are used initially
- *Not ill appearing*
- Ill appearing or CSF pleocytosis
- Ceftriaxone
- Or
- Cephalexin if oral treatment for UTI
- Vancomycin
- Acyclovir (if indicated by BOX 4)

**BOX 3: Bacterial Infection Checklist:**

If "yes" to any questions below, patient is high risk for bacterial infection:
- Born less than 37 weeks gestation
- Prior hospitalization or NICU stay
- Chronic medical problems
- Systemic antibiotics in last 72 hours
- WBC <5,000 or >15,000
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**BOX 4: HSV Checklist:**

If "yes" to any questions below, obtain CSF HSV PCR and viral culture of vesicle, if present:
- Prematurity
- Maternal hx of genital HSV
- ALT >50
- Seizure at home
- ill appearance
- Abnormal triage temperature
- Vesicular rash
- Thrombocytopenia
- Pleocytosis

**BOX 5: LP CSF Studies:**

- CSF Culture
- Cell Count
- Sugar
- Protein
- Consider HSV PCR
- Consider Enterovirus PCR
- If limited fluid, prioritize culture.
References:


