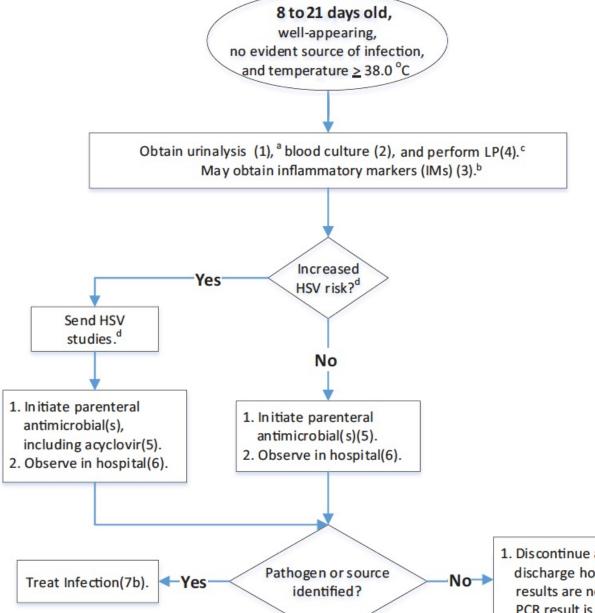
## 8-21 days old



#### **Consider HSV**

- Maternal h/o genital HSV lesions or fever 48 hrs before to 48 hrs after delivery
- Vesicles, mucous membrane ulcers
- Seizures
- Hypothermia
- CSF pleocytosis + negative gram stain
- Leukopenia
- Thrombocytopenia
- Elevated ALT

See 4<sup>th</sup> slide for recommended antibiotics

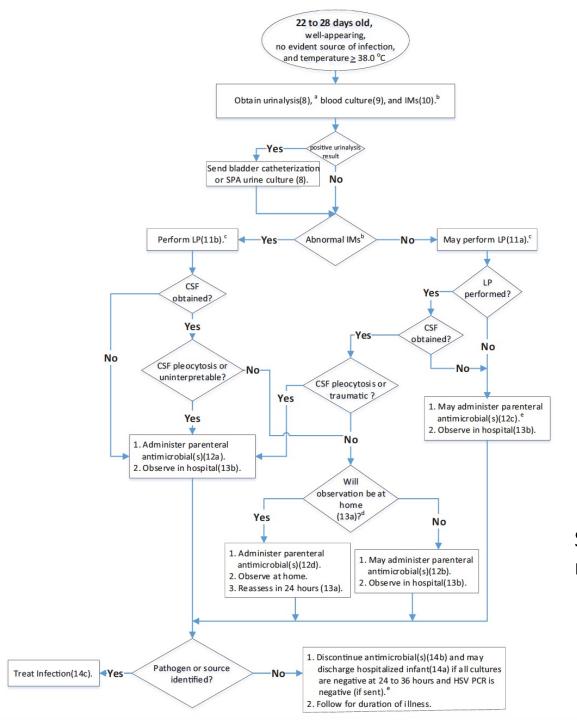
 Discontinue antimicrobial(s)(7a) and may discharge hospitalized infant(7a) if all culture results are negative at 24 to 36 hours and HSV PCR result is negative (if sent).

2. Manage for duration of illness.

**To cite:** Pantell R H, Roberts K B, Adams W G, et al. Evaluation and Management of Well-Appearing Febrile Infants 8 to 60 Days Old . *Pediatrics*. 2021;148(2):e2021052228

### 22-28 days old

Consider and test/treat for HSV as for 8-21 day olds



# Abnormal Inflammatory Markers

- Temp > 38.5
- Procalcitonin > 0.5 ng/mL
- CRP  $\geq$  20 mg/L
- ANC > 4500 or 5200

See 4<sup>th</sup> slide for recommended antibiotics

**To cite:** Pantell R H, Roberts K B, Adams W G, et al. Evaluation and Management of Well-Appearing Febrile Infants 8 to 60 Days Old . *Pediatrics*. 2021;148(2):e2021052228

#### 29-60 days old

Although rare, consider and test/treat for HSV as for 8-21 day olds

29 to 60 days old, well-appearing, no evident source of infection, and temperature > 38.0 °C **Abnormal Inflammatory** Markers Obtain urinalysis(15), a blood culture (16), and IMs (17).b Temp > 38.5 Procalcitonin > 0.5 ng/mL positive urinalysis Yes Increased IMs  $CRP \ge 20 \text{ mg/L}$ Yes-ANC > 4500 or 5200 1. Send bladder catheterization or SPA urine culture if No positive urinalysis positive(15). 1. Send bladder catheterization or SPA urine 2. May perform LP (18a). 3. If CSF result is positive: culture(15). a. Administer parenteral antimicrobial(s) (19a). 2. Need not perform LP(18b). b. Observe closely in hospital (20a). 3. Administer oral antimicrobial(s)(19c). 4. May observe closely at home. de 4. If CSF result is negative and either urinalysis negative or positive 5. Follow-up in 12 to 24 hours (20d). a. May administer parenteral or oral antimicrobial(s)(19b). b. May observe closely in hospital or at home (20b,d). 1. Need not perform LP(18b). 5. If CSF not available or uninterpretable: 2. Need not administer antimicrobial(s)(19d). a. Administer parenteral antimicrobial(s) (19a).c 3. Observe closely at home (20c).d b. May observe closely in hospital or at home (20b).d 4. Follow-up within 24-36 hours (20c). See 4th slide for recommended antibiotics Source Pathogen or source identified at No limited to Yes urine? 24 to 36 hours? 1. Discontinue antimicrobials if administered (21a). 2. Discharge hospitalized infants (21b). No 3. Manage for duration of illness. Treat infection (21d). Yes 1. Complete treatment with oral antimicrobials (21c)

**To cite:** Pantell R H, Roberts K B, Adams W G, et al. Evaluation and Management of Well-Appearing Febrile Infants 8 to 60 Days Old . *Pediatrics*. 2021;148(2):e2021052228

2. Discharge hospitalized infants (21b).

Manage for duration of illness.

TABLE 3 Initial Empirical Antibacterial Therapy for Well-Appearing Febrile Infants 7 to 60 Days Old

Suspected Source of Infection	8–21 d Old	22–28 d Old	29-60 d Old
UTI <sup>a</sup>	Ampicillin IV or IM (150 mg/kg per d divided every 8 h) and either ceftazidime IV or IM (150 mg/kg per d divided every 8 h) or gentamicin IV or IM (4 mg/kg per dose every 24 h)		Ceftriaxone IV or IM (50 mg/kg/dose every 24 h). Oral medications for infants older than 28 d. <sup>b</sup> Cephalexin 50–100 mg/kg per d in 4 doses or cefixime 8 mg/kg per d in 1 dose
No focus identified <sup>c</sup>	Ampicillin IV or IM (150 mg/kg per d divided every 8 h) and either ceftazidime IV or IM (150 mg/kg per d divided every 8 h) or gentamicin IV or IM (4 mg/kg per dose every 24 h) <sup>d</sup>	Ceftriaxone IV or IM (50 mg/kg per dose every 24 h)	Ceftriaxone IV or IM (50 mg/kg/dose every 24 h)
Bacterial meningitis <sup>e</sup>	Ampicillin IV or IM (300 mg/kg per d divided every 6 h) and ceftazidime IV or IM (150 mg/kg per d divided every 8 h)	Ampicillin IV or IM (300 mg/kg per d divided every 6 h) and ceftazidime IV or IM (150 mg/kg per d divided every 8 h)	Ceftriaxone IV (100 mg/kg or d once daily or divided every 12 h) or Ceftazidime IV (150 mg/kg or d divided every 6 h) and vancomycin <sup>f</sup> IV (60 mg/kg or d divided every 8 h)

Use of a local antibiogram, if available, can guide choices. Note: If a focus of infection such as pneumonia, cellulitis, gastroenteritis, or musculoskeletal infection is identified, different regimens that cover typical microbial pathogens for the site of infection should be administered. IM, intramuscular; IV, intravenous. Adapted from Bradley JS, Nelson JD, Barnett ED, et al, eds. 2019 Nelson's Pediatric Antimicrobial Therapy. 25th ed. Itasca, IL: American Academy of Pediatrics; 2019; and Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. Red Book: 2018 Report of the Committee on Infectious Diseases. 31st ed. Itasca, IL: American Academy of Pediatrics; 2018.

**To cite:** Pantell R H, Roberts K B, Adams W G, et al. Evaluation and Management of Well-Appearing Febrile Infants 8 to 60 Days Old. *Pediatrics*. 2021;148(2):e2021052228

<sup>&</sup>lt;sup>a</sup> On the basis of urinalysis results.

<sup>&</sup>lt;sup>b</sup> AAP Subcommittee on Urinary Tract Infection.<sup>73</sup>

<sup>&</sup>lt;sup>c</sup> For example, possible bacteremia. For 22 to 28 day old infants, providers may decide that observation without initiation of therapy is appropriate after risk versus benefit discussion with the infant's parents or caregivers.

<sup>&</sup>lt;sup>d</sup> Gentamicin may provide clinical benefit because of synergy with ampicillin against GBS and enterococcal species.

e On the basis of CSF analysis results. Some experts will add gentamicin or another aminoglycoside to this regimen, particularly if the CSF Gram stain reveals Gram-negative organisms.

f Vancomycin is part of empirical therapy because of the possibility of resistant *S pneumoniae*. It should be stopped if an organism other than *S pneumoniae* is identified, even if susceptibilities are still pending.