

Febrile Infant Pathways (8-60 days)

Inclusion criteria

- Well appearing
- Documented temperature $\geq 100.4^{\circ}\text{F}$ or $\geq 38^{\circ}\text{C}$ by history or rectal measure in clinical setting of office or emergency department
- Gestational age at birth ≥ 37 and < 42 weeks
- Age 8-60 days old

Exclusion criteria (If any are true, manage without this pathway!)

- Newborns 0-7 days old post hospital discharge (in this age group, perform full sepsis evaluation and start empiric treatment)
- Born preterm at less than 37 weeks gestation?
- < 2 weeks old with perinatal course complicated by maternal fever, infection or antimicrobial use?
- Febrile infant with high suspicion of HSV infection or vesicles?
- Focal bacterial infection (like cellulitis, omphalitis, septic arthritis, or osteomyelitis)?
- Clinical diagnosis of bronchiolitis, with or without positive RSV result?
- Documented or suspected immune compromise?
- Neonatal course complicated by surgery or infection?
- Congenital or chromosomal abnormalities?
- Medically fragile infant requiring technology or ongoing therapeutic intervention to sustain life?
- Received immunizations within the last 48h?

Infants who *MAY* be included:

- Upper respiratory tract infection symptoms (that are not diagnostic of viral bronchiolitis)
- Diarrhea \rightarrow stool specimen testing; if negative result, then may use the clinical pathway
- Acute otitis media
- Recent antimicrobial use if current age greater than 2wo
- Positive respiratory viral testing

HSV checklist:

If any are true, proceed to full evaluation and empiric HSV treatment

- Mother with active HSV lesions
- Maternal fever 48h before or 48h after delivery
- Seizures in infant
- Vesicles on skin, scalp, or mucus membrane exam
- Hypothermia
- CSF with pleocytosis for age in absence of positive Gram stain
- Leukopenia
- Thrombocytopenia
- Elevated ALT

Abnormal inflammatory markers:

- Procalcitonin (PCT) $> 0.5\text{ng/mL}$
- CRP $> 20\text{mg/L}$
- ANC $> 4000/\text{mm}^3$

For CSF send: cell count, Gram stain, glucose, protein, culture, and if able meningitis/encephalitis PCR panel

HSV studies: CSF PCR; HSV surface swab of conjunctiva, nasopharynx, mouth, and anus for cultures or HSV PCR; HSV blood PCR; and serum alanine aminotransferase (ALT)

Urine testing: *May* collect a clean catch urine for initial testing, but if the UA results are abnormal then a sterile urine specimen via bladder catheterization must be obtained

Abnormal UA would be:

- +Leukocyte esterase
- ≥ 5 WBCs/HPF
- ≥ 10 WBCs/ mm^3

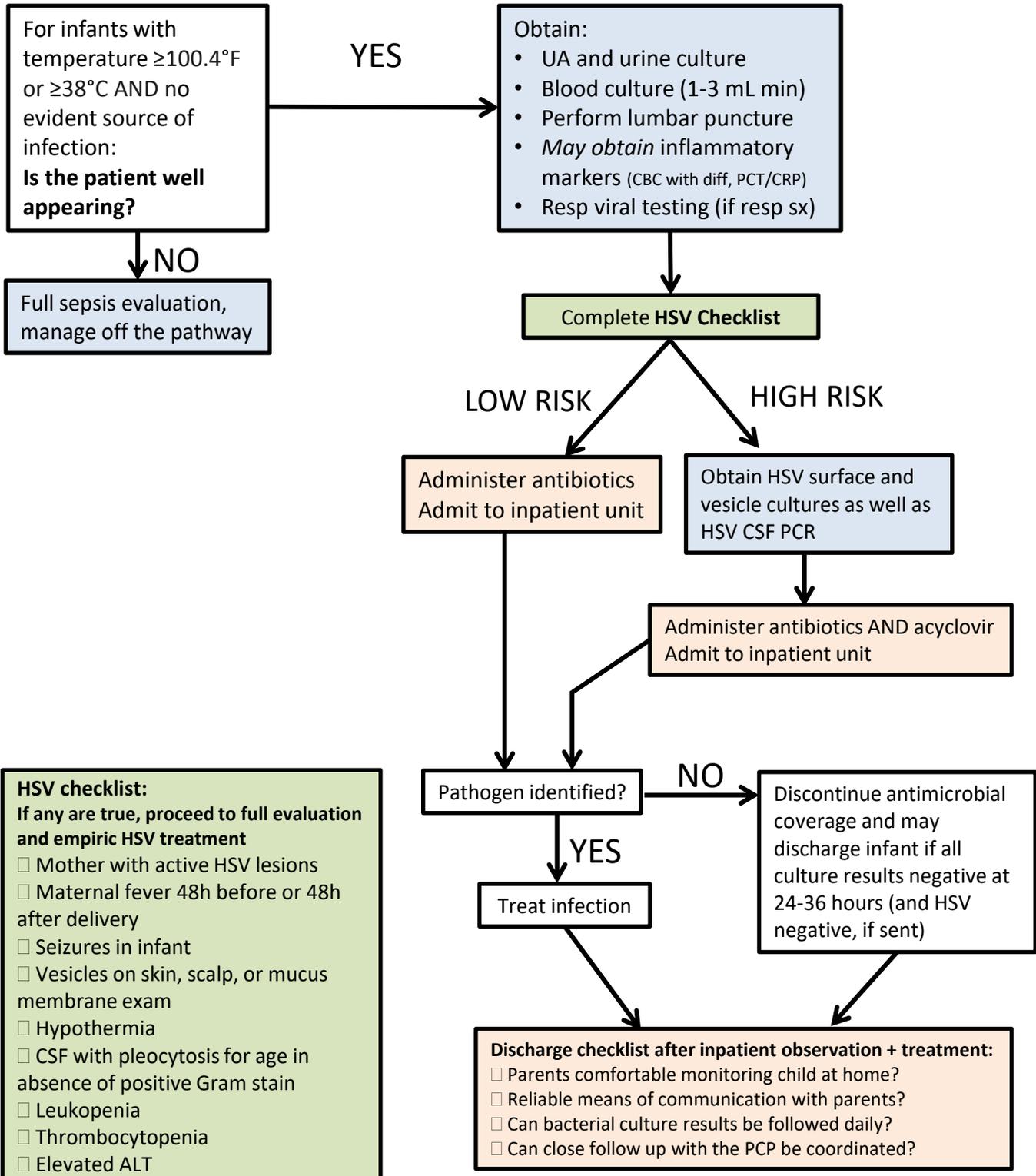
Antimicrobial Treatment

| | No focus identified | Bacterial meningitis | Urinary tract infection | If need HSV coverage also |
|-----------------------|---|---|---|------------------------------|
| 8-21 days old | Ampicillin 50mg/kg Q8h AND either Ceftazidime 50mg/kg Q8h OR Gentamicin 4mg/kg Q24h | Ampicillin 75mg/kg Q6h AND Ceftazidime 50mg/kg Q8h | Ampicillin 50mg/kg Q8h AND either Ceftazidime 50mg/kg Q8h OR Gentamicin 4mg/kg Q24h | ADD Acyclovir 20mg/kg Q8h |
| 22-28 days old | Ceftriaxone 50mg/kg Q24h | Ampicillin 75mg/kg Q6h AND Ceftazidime 50mg/kg Q8h | Ceftriaxone 50mg/kg Q24h | ADD Acyclovir 20mg/kg Q8h |
| 29-60 days old | Ceftriaxone 50mg/kg Q24h | Vancomycin 20mg/kg Q8h AND either Ceftriaxone 50/kg Q12h OR Ceftazidime 50mg/kg Q8h | Ceftriaxone 50mg/kg Q24h OR Cephalexin 25mg/kg Q6h OR Cefixime 8mg/kg Q24h | ADD Acyclovir 20mg/kg Q8h |

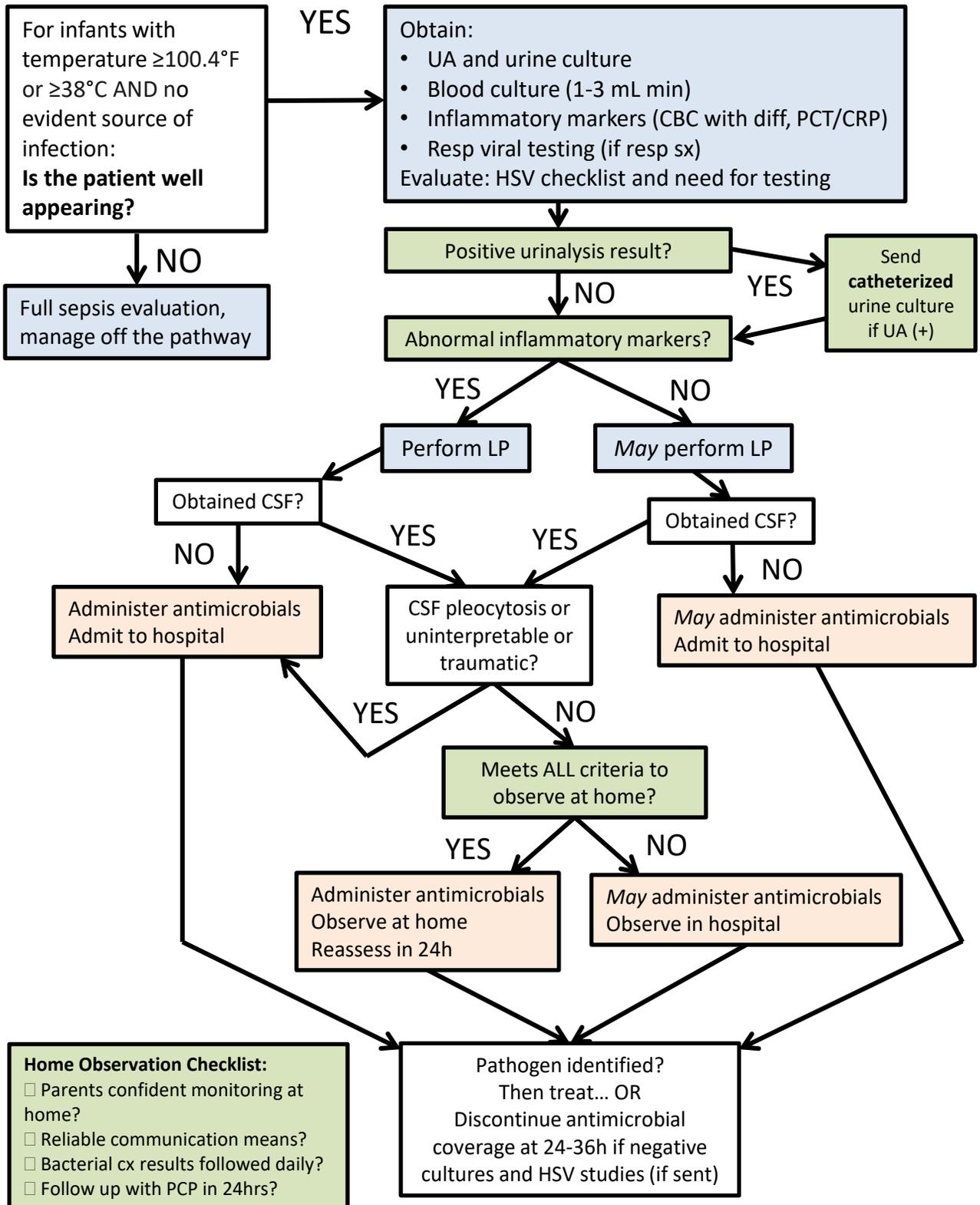
Infants can be observed/monitored at home when ALL of the following are met:

- Urinalysis is normal
- None of the inflammatory markers obtained are abnormal
- CSF analysis is normal or (+) enterovirus
- Verbal teaching and written instructions are provided for home monitoring:
 - Change in general appearance, i.e. dusky color, respiratory distress, or other distress
 - Behavior change, including: lethargy, irritability, inconsolable crying, difficulty consoling/comforting, other distress
 - Difficulty feeding
 - Vomiting
 - Decreased urine output
- Follow up plans for reevaluation in 24h are developed
- Plans are also outlined in case of change in clinical status, including means of communication between the family and providers and access to emergency medical care

Febrile Neonate Pathway (8-21 days)



Febrile Neonate Pathway (22-28 days)



Algorithms based on the REVISE collaborative work and updated with [2021 AAP Febrile Neonate Clinical Guideline](#)

For pediatric hospitalist consultation or transfer, call 406-327-4726

Febrile Infant Pathway (29-60 days)

