

Table 4. Most Common Risk Stratification Criteria for Management of Febrile Young Infants

Prediction Rule	Patient Age	History and Physical Examination Findings	Laboratory Parameters (Defines Low Risk)	Management for Intermediate-Risk or High-Risk Patients	Management for Low-Risk Patients
Boston Criteria ⁹ 1992	28-90 days	<ul style="list-style-type: none"> Well-appearing No antibiotics in preceding 48 hours No immunizations in preceding 48 hours No focal infection 	<ul style="list-style-type: none"> WBC: < 20,000 cells/mcL UA: < 10 WBC/HPF CSF: < 10 WBC/mcL Chest radiograph: no infiltrate^b 	Hospitalize and administer empiric antibiotics	<ul style="list-style-type: none"> Discharge home, if caregiver available by telephone Administer empiric IM ceftriaxone 50 mg/kg Return for 24-hour follow-up for second dose IM ceftriaxone
Philadelphia Criteria ^{10,52} 1993	29-56 days	<ul style="list-style-type: none"> Well-appearing No focal infection 	<ul style="list-style-type: none"> WBC: 5000-15,000 cells/mcL^c Band:total neutrophil (I:T) ratio: < 0.2 UA: < 10 WBC/HPF Urine Gram stain: negative CSF: < 8 WBC/mcL (modified Philadelphia criteria does not include routine CSF testing) CSF Gram stain: negative^c Chest x-ray: no infiltrate^b Stool: no blood, few or no WBC on smear^b 	Hospitalize and administer empiric antibiotics	<ul style="list-style-type: none"> Discharge home, if patient lives within 30 minutes of the hospital 24-hour follow-up required No empiric antibiotics
Rochester Criteria ¹¹ 1994	0-60 days	<ul style="list-style-type: none"> Well-appearing Full-term Normal prenatal and postnatal histories^a No postnatal antibiotics No focal infection 	<ul style="list-style-type: none"> WBC: 5000-15,000 cells/mcL Absolute band count: ≤ 1500/mcL UA: ≤ 10 WBC/HPF Stool: ≤ 5 WBC/HPF on smear^b <p>*No CSF required for risk stratification</p>	Hospitalize, perform LP, and administer empiric antibiotics	<ul style="list-style-type: none"> Discharge home 24-hour follow-up required No empiric antibiotics
Step-by-Step ¹² 2016	0-90 days	<ul style="list-style-type: none"> Well-appearing Aged > 21 days Normal pediatric assessment triangle No clear source of fever 	<ul style="list-style-type: none"> No leukocyturia PCT: < 0.5 ng/mL CRP: ≤ 20 mg/L ANC: ≤ 10,000 cells/mcL <p>*No CSF required for risk stratification</p>	Hospitalize, perform LP, and administer empiric antibiotics	<ul style="list-style-type: none"> Discharge home 24-hour follow-up required No empiric antibiotics
PECARN ¹³ 2019	0-60 days	<ul style="list-style-type: none"> Gestational age > 36 weeks No pre-existing medical conditions or indwelling catheters No antibiotics within 48 hours No soft-tissue infection Not critically ill 	<ul style="list-style-type: none"> UA: negative leukocyte esterase, negative nitrites, and ≤ 5 WBC/HPF ANC: ≤ 4090 cells/mcL^d PCT: ≤ 1.71 ng/mL^d <p>*No CSF required for risk stratification</p>	Hospitalize, perform LP, and administer empiric antibiotics	<ul style="list-style-type: none"> Not defined as rule recently published, but consider the following: <ul style="list-style-type: none"> Discharge home 24-hour follow-up required No empiric antibiotics

^aNormal prenatal and postnatal histories include being full-term, having received no antibiotics, having no unexplained hyperbilirubinemia, no prior hospitalizations (including no prolonged stay in the newborn nursery), and no underlying chronic medical condition.

^bObtained based on symptoms.

^cOriginal Philadelphia criteria used WBC < 15,000/mcL to define low-risk but this has been modified to WBC 5000-15,000/mcL.

^dResults similar when using ANC ≤ 4000/mcL and/or PCT ≤ 0.5 ng/mL.

Abbreviations: ANC, absolute neutrophil count; CRP, C-reactive protein; CSF, cerebrospinal fluid; HPF, high-power field; IM, intramuscular; IV, intravenous; LP, lumbar puncture; PCT, procalcitonin; PECARN, Pediatric Emergency Care Applied Research Network; UA, urinalysis; WBC, white

Get access to more pathways with an individual or group subscription. Visit www.ebmedicine.net/EMPinfo to find out more!