

### Management - Combined Acute and Primary Care

Patient presents with or has a history of fever Temp  $\geq 38^{\circ}$

Do the symptoms and/or signs suggest an immediately life threatening (high risk) illness?

Yes

- Refer immediately to emergency care by 999
- Alert Paediatrician
- Stay with child whilst waiting and prepare documentation

No

Is the child older or younger than 3 months of age?

Younger

Older

Table 1

Clinical Findings	Green - low risk	Amber - intermediate risk	Red - high risk
<b>Colour</b>	• Normal colour of skin, lips and tongue	• Pallor reported by parent/carer	• Pale/mottled/ashen/blue
<b>Activity</b>	• Responds normally to social cues • Content / smiles • Stays awake or awakens quickly • Strong normal cry / not crying	• Reduced response to social cues • Wakes only with prolonged stimulation • Decreased activity • No smile • Poor feeding in infants	• No response to social cues • Unable to rouse or if roused does not stay awake  • Weak, high pitched or continuous cry • Appears ill to a healthcare professional
<b>Respiratory</b>	• None of the amber or red symptoms or signs	• Nasal flaring • Tachypnoea: RR 40-50 if 1-5 years; RR 25-30 if 6-11 years; RR 20-25 if $\geq 12$ years • Oxygen saturation $\leq 95\%$ in air • Crackles	• Grunting • Tachypnoea: RR $>60$ breaths/min if aged $<12$ months; RR $>50$ if 1-5 years; RR $>30$ if 6-11 years; RR $>25$ if $\geq 12$ years • Moderate or severe chest indrawing
<b>Circulation and Hydration</b>	• Normal skin and eyes	• Tachycardia: HR $> 160$ beats/min if age $< 1$ yr; HR $> 150$ beats/min if age 1 - 2 years; HR $> 140$ beats/min if age 3 - 5 years; HR $> 120$ beats/min if 6-11 years; HR $>100$ beats/min if age $>12$ years • Dry mucous membranes • Reduced urine output • Central refill 2-3 seconds	• Reduced skin turgor • Capillary refill $>3$ seconds
<b>Other</b>	• None of the amber or red symptoms or signs	• Fever for $\geq 5$ days • Swelling of a limb or joint • Non-weight bearing / not using an extremity • A new lump $\geq 2$ cm • Age 3-6 months temp $\geq 39^{\circ}\text{C}$ ( $102.2^{\circ}\text{F}$ ) with no clear focus of infection • Additional parental/carer support required? • Recent return from malaria endemic area in preceding 3 months	• Bulging fontanelle • Neck stiffness • Focal seizures • Sustained tachycardia • Non-blanching rash • Focal neurological signs • Bile-stained vomiting  • Age 0-3 months with axillary temp $\geq 38^{\circ}\text{C}$ ( $100.4^{\circ}\text{F}$ ) - note children under 1 month of age at highest risk of sepsis/ meningitis. If 1-3 months of age with fever within 48 hours of Men B vaccine and clinically well, consider <a href="#">safety netting</a> • Limb pain

#### Green Action

**Perform:**

- Assess for focus of infection - If no focus in child under 5 years of age, consider clean catch urine specimen to evaluate for urinary tract infection.

#### Provide advice to send home

Provide the parent/carer with [fever](#) parent advice sheet and advise on signs, symptoms and changes - signpost the parent/carer where to go, should things change.

#### Amber Action

If no source of fever in child under 5 years of age, obtain clean catch urine specimen to evaluate for urinary tract infection. Seek advice/review from Paediatrician, particularly if clinical concern. Agree plan with parents.

#### Management Plan

If clear source of fever and child appears well:

- Provide the parent/carer with [fever](#) parent advice sheet and advise on signs, symptoms and changes - signpost the parent/carer where to go, should things change
- Arrange any required follow up or review
- Send any relevant documentation to the provider of follow up or review

Refer

#### Urgent Action

Refer immediately to emergency care – consider 999  
Alert Paediatrician  
Commence relevant treatment to stabilise child for transfer  
Send relevant documentation

**Hospital Emergency Department / Paediatric Unit**

GMC Best Practice recommends: Record your findings (See "Good Medical Practice" <http://bit.ly/1DPX12b>)



First Version: Oct 2022 Review Date: Oct 2025.

CS51313

**Table 2**

Normal Values
<b>Respiratory Rate at rest [breath/min]</b>
Birth-2m 25-50
3m-5m 25-45
6m-17m 20-40
18m-2yrs 20-34
>2-7yrs 20-30
>8-11yrs 15-25
>12yrs 12-24
<b>Heart Rate [beat/min]</b>
Birth-2m 120-170
3m-5m 115-160
6m-17m 110-160
18m-2yrs 100-155
>2-3yrs 100-150
>3-4yrs 90-140
4-5yrs 80-135
6-7yrs 80-130
8-12yrs 70-120
>12yrs 65-115
Ref: Advanced Paediatric Life Support 6th Edition. Advanced Life Support group Wiley Blackwell/2015 BMJ Books

Diagnoses to be considered	Symptoms and signs in conjunction with fever
<b>Meningococcal septicaemia</b>	<p><b>Non blanching rash</b> (this may not be the first sign), particularly with one or more of the following:</p> <ul style="list-style-type: none"> <li>•An ill-looking child</li> <li>•Lesions larger than 2mm in diameter (purpura)</li> <li>•CRT <math>\geq</math>3 secs</li> <li>•Neck stiffness</li> <li>•Limb pain*</li> </ul>
<b>Meningitis<sup>1</sup></b>	<ul style="list-style-type: none"> <li>•Neck stiffness</li> <li>•Bulging fontanelle</li> <li>•Decreased level of consciousness</li> <li>•Convulsive status epilepticus</li> <li>•Cold extremities</li> </ul>
<b>Herpes simplex encephalitis</b>	<ul style="list-style-type: none"> <li>•Focal neurological signs</li> <li>•Focal seizures</li> <li>•Decreased level of consciousness</li> </ul>
<b>Pneumonia</b>	<p>Tachypnoea, measured as:</p> <ul style="list-style-type: none"> <li>•0 – 5 mths - RR &gt;60 breaths/min</li> <li>•6 – 12 mths - RR &gt;50 breaths/min</li> <li>•&gt;12 mths - RR &gt;40 breaths/min</li> <li>•Crackles in the chest</li> <li>•Nasal flaring</li> <li>•Chest recession</li> <li>•Cyanosis</li> <li>•Oxygen saturation <math>\leq</math>95%</li> </ul>
<b>Urinary tract infection (in children aged older than 3 months)<sup>2</sup></b>	<ul style="list-style-type: none"> <li>•Vomiting</li> <li>•Abdominal pain or tenderness</li> <li>•Lethargy</li> <li>•Urinary frequency or dysuria</li> <li>•Irritability</li> <li>•Offensive urine, haematuria</li> <li>•Poor feeding</li> </ul>
<b>Septic arthritis/osteomyelitis</b>	<ul style="list-style-type: none"> <li>•Swelling of a limb or joint</li> <li>•Non-weight bearing</li> <li>•Not using an extremity</li> </ul>
<b>Kawasaki disease<sup>3</sup></b>	<p>Fever lasting longer than 5 days and at least 4 of the following:</p> <ul style="list-style-type: none"> <li>•Bilateral conjunctival injection</li> <li>•Change in upper respiratory tract mucous membranes (e.g. injected pharynx, dry cracked lips or strawberry tongue)</li> <li>•Change in the peripheral extremities (e.g. oedema, erythema or desquamation)</li> <li>•Polymorphous rash</li> <li>•Cervical lymphadenopathy</li> </ul>

1. Classical sign (neck stiffness, bulging fontanelle, high pitched cry) are often absent in infants with bacterial meningitis
2. Urinary tract infection should be considered in any child aged younger than 3 months with fever (See urinary tract infection in Children, NICE clinical guideline CG054, August 2007)
3. Note: in rare cases, incomplete / atypical Kawasaki disease may be diagnosed with fewer features.
4. Thompson MJ, Ninis N, Perera R, et al. Clinical recognition of meningococcal disease in children and adolescents. Lancet. 2006; 367 (9508): 397-403.

Glossary of Terms	
ABC	Airways, Breathing, Circulation
APLS	Advanced Paediatric Life Support
AVPU	Alert Voice Pain Unresponsive
B/P	Blood Pressure
CPD	Continuous Professional Development
CRT	Capillary Refill Time
ED	Hospital Emergency Department
GCS	Glasgow Coma Scale
HR	Heart Rate
MOI	Mechanism of Injury
PEWS	Paediatric Early Warning Score
RR	Respiratory Rate
WBC	White Blood Cell Count