

# Identifying the risk of **serious illness** in **children with fever**

1. Identify any immediately life-threatening features including compromise of the airway, breathing or circulation and decreased level of consciousness.
2. Use the “traffic light system” to predict risk of serious illness

CLINICAL CONDITION	Low risk	Intermediate risk	High risk
<b>Skin appearance</b>	Normal colour of skin, lips and tongue	Pallor reported by parent/carer	Pale, mottled, ashen, blue
<b>Responsiveness</b>	<ul style="list-style-type: none"> <li>▪ Responds normally to social cues</li> <li>▪ Content/smiles</li> <li>▪ Stays awake or awakens quickly</li> <li>▪ Strong normal cry or not crying</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not responding normally to social cues</li> <li>▪ Wakes only with prolonged stimulation</li> <li>▪ Decreased activity</li> <li>▪ No smile</li> </ul>	<ul style="list-style-type: none"> <li>▪ No response to social cues</li> <li>▪ Appears ill to a healthcare professional</li> <li>▪ Does not wake or if roused does not stay awake</li> <li>▪ Weak, high pitched or continuous cry</li> </ul>
<b>Respiratory</b>	Normal	<ul style="list-style-type: none"> <li>▪ Nasal flaring</li> <li>▪ Tachypnoea: 6–12 months RR &gt; 50 breaths/minute &gt;12 months RR &gt; 40 breaths/minute</li> <li>▪ Oxygen saturation ≤ 95% in air</li> <li>▪ Crackles/chest signs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grunting</li> <li>▪ Tachypnoea: RR &gt; 60 breaths/minute</li> <li>▪ Moderate or severe chest indrawing</li> </ul>
<b>Hydration</b>	<ul style="list-style-type: none"> <li>▪ Normal skin and eyes</li> <li>▪ Moist mucous membranes</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dry mucous membranes</li> <li>▪ Poor feeding in infants</li> <li>▪ Capillary refill time (CRT) ≥ 3 seconds</li> <li>▪ Reduced urine output</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced skin turgor</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>▪ None of the amber or red symptoms or signs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fever for ≥ 5 days</li> <li>▪ Swelling of a limb or joint</li> <li>▪ Non-weight bearing, not using an extremity</li> <li>▪ A new lump &gt; 2 cm</li> <li>▪ None of the red symptoms or signs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Age 0 – 3 months, temperature ≥ 38°C</li> <li>▪ Age 3 – 6 months, temperature ≥ 39°C</li> <li>▪ Non-blanching rash</li> <li>▪ Bulging fontanelle</li> <li>▪ Neck stiffness</li> <li>▪ Status epilepticus</li> <li>▪ Focal neurological signs</li> <li>▪ Focal seizures</li> <li>▪ Bile-stained vomiting</li> </ul>
<b>ACTION</b>	Reassure	Review	Refer

**3. Refer:** ANY of the symptoms or signs in the red column

- Immediately life-threatening illness – call ambulance
- All other situations – to be assessed in secondary care within two hours

**Review:** ANY of the symptoms or signs in the amber column, but NONE in the red column

- Diagnosis made – treat accordingly
- No diagnosis – provide parent/carer with verbal and written information on warning symptoms and ensure that they know how to access further healthcare after hours. Arrange an appointment for follow-up.

**Reassure:** ANY of the symptoms and signs in the green column, but NONE in the amber or red columns

- Provide parent/carer with advice on symptomatic management and when to seek further attention from healthcare services.

**4. Advice for care at home:**

Managing child's temperature	Care at home	When to seek further help
<p><b>DO</b></p> <ul style="list-style-type: none"> <li>▪ Use paracetamol if the child appears distressed or unwell</li> <li>▪ Use ibuprofen if there is no response to paracetamol</li> </ul> <p><b>DO NOT</b></p> <ul style="list-style-type: none"> <li>▪ Routinely use paracetamol and ibuprofen together</li> <li>▪ Use paracetamol for the specific purpose of preventing febrile convulsion</li> <li>▪ Under-dress or over-wrap the child</li> <li>▪ Sponge the child (i.e. "tepid sponging")</li> </ul>	<ul style="list-style-type: none"> <li>▪ Keep up regular fluids (breast milk if breast feeding)</li> <li>▪ Look for signs of dehydration: sunken fontanelle, dry mouth, sunken eyes, absence of tears, decreased urine output, overall unwell appearance</li> <li>▪ Look for signs of a non-blanching rash</li> <li>▪ Check the child regularly overnight</li> <li>▪ Keep child away from day-care or school while the fever persists (notify them of illness)</li> </ul>	<ul style="list-style-type: none"> <li>▪ The child has a fit</li> <li>▪ The child develops a non-blanching rash</li> <li>▪ The fever is persistent</li> <li>▪ The parent/carer feels that the child's condition is worsening rather than improving</li> <li>▪ The parent/carer is more worried than when they previously sought advice</li> <li>▪ The parent/carer is distressed or concerned that they are unable to look after the child</li> </ul>

**Adapted from:**

National Institute of Clinical Excellence (NICE). Feverish illness in children. NICE Clinical Guideline 47. NICE, London, 2007. Available from: [www.nice.org.uk](http://www.nice.org.uk) (Accessed July, 2010).