Use Traffic light system for identifying risk of serious illness

<table>
<thead>
<tr>
<th>Colour</th>
<th>Green - low risk</th>
<th>Amber - intermediate risk</th>
<th>Red - high risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal Colour of skin, lips and tongue</td>
<td>Pallor reported by parent/carer</td>
<td>Pale/mottled/ashen/ blue</td>
</tr>
<tr>
<td>Activity</td>
<td>Responds normally to social cues</td>
<td>Not responding normally to social cues</td>
<td>No response to social cues</td>
</tr>
<tr>
<td></td>
<td>Content/smiles</td>
<td>Wakes only with prolonged stimulation</td>
<td>Appears ill to a healthcare professional</td>
</tr>
<tr>
<td></td>
<td>Stays awake or awakens quickly</td>
<td>Decreased activity</td>
<td>Unable to rouse or if roused does not stay awake</td>
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<tr>
<td></td>
<td>Strong normal cry/not crying</td>
<td>No smile</td>
<td>Weak, high-pitched or continuous cry</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Nasal flaring</td>
<td>Tachypnoea: - PR &gt; 50 breaths/minute age 6 - 12 months - PR &gt; 10 breaths/minute age &gt; 12 months</td>
<td>Grunting</td>
</tr>
<tr>
<td></td>
<td>Tachypnoea: Oxygen saturation &lt; 95% in air</td>
<td>Crackles</td>
<td>Tachypnoea: - PR &gt; 60 breaths/minutes</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Moderate or severe chest indrawing</td>
</tr>
<tr>
<td>Hydration</td>
<td>Normal skin and eyes</td>
<td>Dry mucous membrane</td>
<td>Reduced skin turgor</td>
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<tr>
<td></td>
<td>Moist mucous membranes</td>
<td>Poor feeding in infants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CRT &gt; 3 seconds</td>
<td>Reduced urine output</td>
<td></td>
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<tr>
<td>Other</td>
<td>None of the amber or red symptoms or signs</td>
<td>Fever for &gt; 5 days</td>
<td>Age 0-3 months, temperature ≥ 38°C</td>
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<tr>
<td></td>
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<td>Swelling of a limb or joint</td>
<td>Age 3-6 months, temperature ≥ 39°C</td>
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<td></td>
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<td>Non-weight bearing/not using an extremity</td>
<td>Non-blanching rash</td>
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<tr>
<td></td>
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<td>A new lump &gt; 2 cm</td>
<td>Bulging fontanelle</td>
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<td></td>
<td></td>
<td></td>
<td>Neck stiffness</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Status epilepticus</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Focal neurological signs</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Focal seizures</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Bile-stained vomiting</td>
</tr>
</tbody>
</table>

CRT: capilary refill time
PR: respiratory rate
Symptoms and signs of specific illnesses

<table>
<thead>
<tr>
<th>Diagnosis to be considered</th>
<th>Symptoms and signs in conjunction with fever</th>
</tr>
</thead>
</table>
| Meningococcal disease      | Non-blanching rash, particularly with one or more of the following:  
|                            |  • an ill-looking child  
|                            |  • lesions larger than 2 min in diameter (purpura)  
|                            |  • CRT ≥ 3 seconds  
|                            |  • neck stiffness  
| Meningitis¹                |  • Neck stiffness  
|                            |  • Building fontanelle  
|                            |  • Decreased level of consciousness  
|                            |  • Convulsive status epilepticus  
| Herpes simplex encephalitis|  • Focal neurological signs  
|                            |  • Focal seizures  
|                            |  • Decreased level of consciousness  
| Pneumonia                  |  • Tachypnoea, measured as:  
|                            |   - 0-5 months - PR > 60 breaths/minute  
|                            |   - 6-12 months - PR > 50 breaths/minute  
|                            |   - > 12 months - PR > 40 breaths/minute  
|                            |  • Crackles in the chest  
|                            |  • Nasal flaring  
|                            |  • Chest indrawing  
|                            |  • Cyanosis  
|                            |  • Oxygen saturation < 95%  
| Urinary tract infection    |  • Vomiting  
| (in children aged older than 3 months)² |  • Poor feeding  
|                            |  • Lethargy  
|                            |  • Irritability  
|                            |  • Abdominal pain or tenderness  
|                            |  • Urinary frequency or dysuria  
|                            |  • Offensive urine or haematuria  
| Septic arthritis/osteomyelitis |  • Swelling of a limb or joint  
|                            |  • Not using an extremity  
|                            |  • Non-weight bearing  
| Kawasaki disease³          | Fever lasting longer than 5 days and at least four of the following:  
|                            |  • bilateral conjunctive injection  
|                            |  • change in upper respiratory tract mucous membranes (for example, injected pharynx, dry cracked lips or strawberry tongue)  
|                            |  • change in the peripheral extremities (for example, oedema, erythema or desquamation)  
|                            |  • polymorphous rash  
|                            |  • cervical lymphadenopathy  

CRT: capillary refill time  
PR: respiratory rate

¹ Classical signs (neck stiffness, bulging fontanelle, high-pitched cry) are often absent 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, publication expected August 2007).
³ Note: in rare cases, incomplete/atypical Kawasaki disease may be diagnosed with fewer features.
Assessment of a child with fever by a non-paediatric practitioner / remote assessment

Do symptoms and/or signs suggest an immediately life-threatening illness?
(i.e. compromise of airway / breathing / circulation / conscious level)

Yes

Refer immediately to emergency medical care by most appropriate mode of transport (usually by 999 ambulance)

No

Look for traffic light features and symptoms and signs of specific diseases (pages 1,2)
Document temperature, heart rate, respiratory rate, capillary refill time, colour, activity and hydration status

If all green features and no amber or red
Child can be managed at home with appropriate care advice
Always provide Verbal / written information about care of child with fever, warning signs and when to seek further advice

If any amber features and no diagnosis reached
Look for symptoms and signs of specific diseases
Provide parents/carers with a safety net or refer to a paediatric specialist for further assessment
If remotely assessed then arrange assessment in face to face setting

Refer child urgently to the care of a paediatric specialist
If remotely assessed
1. send child to be assessed in face to face setting within 2 hours
2. If indicated refer urgently to a paediatric specialist by appropriate mode of transport

If any red features

Remember to check urine in unexplained fever

Provide Safety net with
1. Verbal/written information about warning symptoms and how to access health care
2. Arrange follow-up
3. Liaise with other professionals and arrange direct access for patient if needed

Administer parenteral antibiotics if meningococcal disease suspected and refer urgently to hospital
ASSESSMENT OF UNWELL CHILD
document the following

1. Check for any life threatening features;

Compromise of
- Airway □
- Breathing □
- Circulation □
- or Decreased consciousness □

Seek Medical input urgently – Resuscitate – Transfer

2. Record

Temperature
Capillary refill time
Respiratory rate
(age variations for respiratory and heart rate – check WETFAG chart)
check blood glucose if possible

3. Any Signs of dehydration?
prolonged capillary refill time  Abnormal skin turgor
Abnormal respiratory pattern  Weak pulse  Cool extremities

4. Check for symptoms and signs using traffic light system to predict the risk of serious illness

MIU Handbook / OoH’s Intranet

5. Any AMBER / RED signs or symptoms SEEK ADVICE / ASSISTANCE

<table>
<thead>
<tr>
<th>COLOUR</th>
<th>AMBER</th>
<th>RED</th>
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</thead>
<tbody>
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<td>□</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>□</td>
<td>□</td>
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<tr>
<td>RESPS</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>HYDRATION</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>OTHER</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Please tick box
Use Common assessment tool based on NICE guidelines and follow the pathway MIU Handbook / OoH’s Intranet)

6. Look for a source of fever and check for symptoms and signs of specific diseases

7. Action taken:

Name of patient: Date of birth: NHS number:

Name of healthcare professional: Date:

Signature: Time:
Management of children under 5 years with fever by a Paediatric specialist

Child under 3 months of age

**Assess:** Look for life-threatening, traffic light and specific diseases symptoms and signs

- Observe and monitor:
  - temperature
  - heart rate
  - respiratory rate

- Perform:
  - full blood count
  - C-reactive protein
  - blood culture
  - urine test for urinary tract infection
  - Chest X-ray
  - if respiratory signs are present
  - stool culture if diarrhoea is present

- Admit, perform lumbar puncture and start parenteral antibiotics if the child is:
  - younger than 1-month old
  - 1–3 months old appearing unwell
  - 1–3 months old and with a white blood cell count of less than 5 or greater than 15x10⁹/litre

Whenever possible, perform lumbar puncture before the administration of antibiotics

If all green features and no amber or red

- Test urine for urinary tract infection.
- Assess for signs of pneumonia.
- Do not perform routine blood tests or chest X-ray.

If no diagnosis is reached, manage the child at home with appropriate care advice and when to seek help

Child 3 months of age or older

- If any amber features and no diagnosis reached
  - Perform (unless deemed unnecessary by experienced paediatrician)
    - urine test for urinary tract infection
    - full blood count
    - blood culture
    - C-reactive protein.

- Perform chest x-ray if fever higher than 39°C and white blood cell count greater than 20x10⁹/litre.
  - Consider lumbar puncture if child is younger than 1-year old.

- If any red features and no diagnosis reached
  - Perform:
    - blood culture
    - full blood count
    - urine test for urinary tract infection
    - C-reactive protein.

  - Consider the following, as guided by clinical assessment:
    - lumbar puncture in children of all ages
    - chest X-ray
    - serum electrolytes
    - blood gas.

Consider admission according to clinical and social circumstances and treat.
If admission is not necessary but no diagnosis has been reached, provide a safety net for the parents/carers.
1. Verbal / written information about warning symptoms and how to access health care
2. Arrange follow-up
3. Liaise with other professionals and arrange direct access for patient if needed

Consider admission if:
- younger than 1-month old
- 1–3 months old appearing unwell
- 1–3 months old and with a white blood cell count of less than 5 or greater than 15x10⁹/litre