Fever no focus in children < 5 years

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Fever is usually defined by a temperature ≥ 38° C.
Measure temperature with an electronic thermometer in the axilla in infants < 4 weeks.

Take fever seriously – it may be a sign of a serious or life-threatening illness. Take parent's perception of a fever seriously. Validate their concerns as they know their child best.

Assess airway, breathing, circulation, disability (ABCD) first.

Consider using either paracetamol or ibuprofen in children who appear distressed.

- Do not use with the sole aim of reducing body temperature
- Do not rely on a change in temperature to differentiate between serious and non-serious illness.

Symptoms and signs risk assessment table

(Any one of the symptoms or signs in the higher category places the child in the higher category. When assessing children with learning disabilities, take the individual child's learning disability into account when interpreting table)

	Green	Amber	Red
Colour	Normal colour	Pallor reported by parent / carer	Pale / Mottled / Ashen / Blue
Activity	Responds normally to social cues Content / smiles Stays awake / awakens quickly Strong normal cry / not crying	Not responding normally to social cues No smile Decreased activity Wakes only with prolonged stimulation	No response to social cues Appears "ill" Does not wake or stay awake if roused Weak, high-pitched or continuous cry
Respiratory		Nasal flaring Tachypnoea • RR >50 in 6-12 months • RR >40 in > 12 month Oxygen sats ≤95% in air Crackles in chest	Grunting Tachypnoea RR >60 Chest indrawing
Circulation & Hydration	Normal skin and eyes Moist mucous membranes	Tachycardia: • HR >160 in <12 m • HR > 150 in 12 - 24 months • HR > 140 in 2-5 years CRT ≥ 3 seconds Dry mucous membranes Poor feeding in infants Reduced urine output	Reduced skin turgor
Other	None of the amber or red symptoms or signs	Age 3-6 months with temp ≥ 39° Fever ≥ 5 days Rigors Swelling of limb or joint Non-weight bearing limb / not using an extremity	Age < 3 months with temp ≥ 38° Non-blanching rash Bulging fontanelle Neck stiffness Status epilepticus Focal neurological signs Focal seizures

Symptoms / signs of specific diseases:

Diagnosis to be considered	Symptoms and signs in conjunction with fever
Meningococcal disease	Non-blanching rash, particularly with ≥1 of the following: - An ill looking child - Lesions >2mm in diameter (purpura) - Cap refill ≥3 seconds - Neck stiffness
Bacterial meningitis Be aware that classic signs are often absent in infants	Neck stiffness Bulging fontanelle Decreased level of consciousness Convulsive status epilepticus
Disseminated herpes simplex virus in < 4 weeks	Non-specific signs of neonatal sepsis Jaundice or bleeding or hypoglycaemia History of maternal genital herpes or contact with cold sore Abnormal LFTs or clotting May have normal CRP **Send EDTA blood for urgent HSV PCR** **Start I.V aciclovir if high index of suspicion**
Herpes simplex encephalitis	History of maternal genital herpes or contact with cold sore Focal neurological signs and / or focal seizures Decreased level of consciousness
Pneumonia	Tachypnoea 0-5 months RR >60 6-12 months RR >50 >12 months RR >40 Crackles in the chest Nasal flaring Chest indrawing Cyanosis Oxygen saturations ≤95%
UTI	Consider in any child < 3 months with fever Consider in child >3 months and ≥1 of the following: - Vomiting - Poor feeding - Lethargy - Irritability - Abdominal pain or tenderness - Urinary frequency or dysuria
Septic arthritis / osteomyelitis	Swelling of limb or joint Not using an extremity Non-weight bearing
Kawasaki disease	Fever for >5 days and at least 4 of the following: - Bilateral conjunctival injection - Change in mucous membranes - Change in the extremities - Polymorphous rash - Cervical lymphadenopathy
Imported infection	Recent travel abroad Exclude malaria and typhoid

Investigation and Management of children < 3 months with fever

Perform:

- Blood culture (aim for 2 mls)
- FBC, CRP
- Urine dip for signs of UTI and send for culture
- CXR only if respiratory signs present
- Stool M, C+S and virology, if diarrhoea present
- Consider HSV PCR, LFTs & clotting in < 4 weeks

LP in:

- All infants < 1 month
- Infants 1 – 3 months
  - who appear unwell
  - with WBC < 5 x10^9/L or > 15 x10^9/L

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Give I.V antibiotics* and admit:

- ALL infants < 1 month; and
- Infants 1 – 3 months
  - who appear unwell
  - with WBC < 5 x10^9/L or > 15 x10^9/L

*Antibiotics: **cefotaxime + amoxicillin.**
Consider ceftriaxone in place of cefotaxime if > 1 month and renal function normal
Consider adding I.V. aciclovir if treating with I.V antibiotics

Management of children > 3 months

In children with fever no focus and no features of serious illness – "green" category:

- Urine dip for signs of UTI
- Assess for symptoms and signs of pneumonia

Do not routinely perform bloods and CXRs in children who have no features of serious illness.

In children with fever no focus and **≥ 1 "amber"** features, perform:

- FBC, CRP
- Blood culture
- Urine dip for signs of UTI
- CXR in child with fever > 39º and WBC> 20 x10^9/L
- Consider LP if age < 1 year

Unless deemed unnecessary by an experienced Paediatrician

In children with fever no focus and **≥ 1 "red"** features, perform:

- FBC, CRP
- Blood culture
- Urine dip for signs of UTI

Consider, as guided by clinical assessment:

- Lumbar puncture
- CXR
- Serum electrolytes and blood gas

Immediate treatment with oxygen, intravenous antibiotics +/- fluid bolus(es) is required in children who are:

- Shocked
- Unrousable
- Showing signs of meningococcal disease

Please refer to the antimicrobial guidelines for specific therapy

In children with an **unclear focus and appear unwell,** or those with a **suspected or identified bacterial infection,** decisions regarding **admission to hospital** and **intravenous antimicrobial therapy** should be made **after careful clinical and social assessment,** and **led by senior decision makers** e.g. CED Consultant / Registrar / ANP**.**

Regardless of category, a **period of observation / admission** in hospital (with or without investigations) should be considered as part of the assessment to help differentiate non-serious from serious illness

Consider:

- Social and family circumstances
- Parental anxiety and instinct
- Repeated attendances to CED or seeking healthcare advice repeatedly
- Child remains ill longer than expected for a self-limiting illness.
- Contact with people who have serious infections or recent travel abroad

Discharging from the CED

If all 'green' features and no 'amber' or 'red' features:

- Child can be cared for at home
- Give advice on when to seek further attention from healthcare services

If any amber or red features and no diagnosis is reached, but child **does not** need to be admitted to hospital:

Provide 1 or more of following:

- **verbal and written information** on warning symptoms and how to access further healthcare - **use CED fever leaflet**
- **follow-up** at a specified time and place
- direct access for the child if further assessment required

Advise parents on when to seek further help:

- Child has a **fit** or develops a **non-blanching rash**
- Parent feels that child is **less well** or they are **more worried** than when they previously sought advice
- Fever lasts **> 5 days**
- Parent is distressed, or concerned that they are unable to look after their child.

Care at home:

1. Temperature management. **NB tepid sponging not recommended**
2. Advice on looking after a feverish child:
   - check child during the night
   - offer regular fluids and encourage to drink more if becoming dehydrated.
   - how to detect signs of dehydration
   - how to identify a non-blanching rash
   - keep child away from nursery or school, inform nursery or school.