NHS
Shropshire
Clinical Commissioning Group

The Big 6

Most common conditions children present with for urgent care.

- Bronchiolitis/Croup
- Fever/Sepsis
- Gastroenteritis
- Head injury
- Wheezy child/Asthma
- Abdominal pain

Contents

The Big 6

Dear Colleague

The Shropshire Children's Commissioner along with clinical representatives from acute, community and primary care, are all working towards three main objectives:

- To promote evidence-based assessment and management of unwell children & young people for the most common conditions when accessing local NHS services in an emergency or urgent scenario;
- To build consistency across Shropshire, so all healthcare professionals understand the pathway and can assess, manage and support children, young people and their families during the episode to the same high standards regardless of where they present;
- To support local healthcare professionals to share learning and expertise across organisations in order to drive continuous development of high quality urgent care pathways for children & young people.

Shropshire Clinical Commissioning Group are keen to promote the use of the assessment tools included in this booklet for the six most common conditions/symptoms that can cause children and young people to present for emergency and urgent care. These six conditions/symptoms are

- Bronchiolitis/croup
- Fever/Sepsis
- Gastroenteritis
- Head injury
- Wheezy child/Asthma
- Abdominal Pain.

These assessment tools have been developed using both national guidance such as NICE and SIGN publications, along-side local policies and protocols, and have been subject to clinical scrutiny. Whilst it is hoped that all healthcare professionals who work with children and young people along this pathway will acknowledge and embed the use of this guidance, it must be stressed that the guidance does not override the individual responsibility of the healthcare professionals to make decisions appropriate to the circumstances of the individual patient in consultation with them.

We hope these tools support you and your colleagues to provide ever improving high quality care for children and young people on the urgent and emergency care pathway.

Yours sincerely

Clinical Assessment Tool

Babies/Children under 2 years with Suspected Bronchiolitis

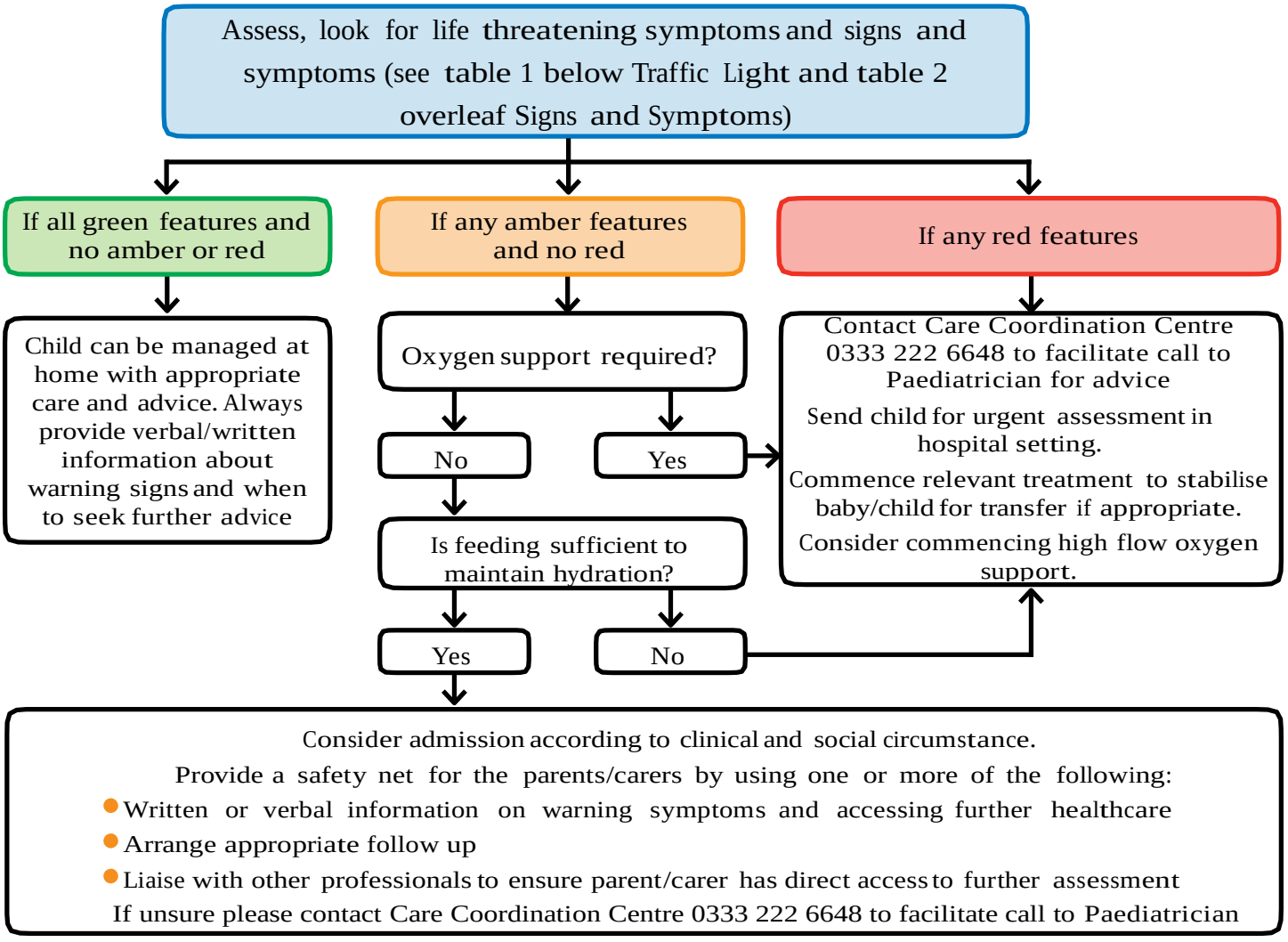


Table 1 Traffic light system for identifying severity of illness

	Green – low risk	Amber – Intermediate risk	Red – high risk
Behaviour	• Alert • Normal	• Irritable • Not responding normally to social cues • Decreased activity • No smile	• Unable to rouse • Wakes only with prolonged stimulation • No response to social cues • Weak, high pitched or continuous cry • Appears ill to a healthcare professional
Circulation	CRT < 2 secs	CRT 2 - 3 secs	CRT over 3 secs
Skin	Normal colour skin, lips & tongue moist mucous membranes	Pale/mottled Pallor colour reported by parent/carer cool peripheries	Pale/Mottled/Ashen blue Cyanotic lips and tongue
Respiratory Rate	Under 12mths <50 breaths/ minute Over 12 mths <40 breaths/ minute No respiratory distress	<12 mths 50-60 breaths/minute >12 months 40-60 breaths/minute	All ages > 60 breaths/minute
SATS in air	95% or above	92 - 94%	<92%
Chest Recession	None	Moderate	Severe
Nasal Flaring	Absent	May be present	Present
Grunting	Absent	Absent	Present
Feeding Hydration	Normal – no vomiting	50-75% fluid intake over 3-4 feeds +/- vomiting. Reduced urine output	<50% fluid intake over 2-3 feeds +/- vomiting. Significantly reduced urine output.
Apnoeas	Absent	Absent	Present*

CRT: Capillary refill time *Apnoea – for 10-15 secs or shorter if accompanied by a sudden decrease in saturations/central cyanosis or bradycardia
SATS: Saturation in air

Clinical Assessment Tool

Babies/Children under 2 years with Suspected Bronchiolitis

Healthcare professionals should be aware of the increased need for hospital admission in infants with the following:

- Pre existing lung disease, congenital heart disease, neuromuscular weakness, immune-incompetence
- Age <6 weeks (corrected)
- Prematurity
- Family anxiety
- Re-attendance
- Duration of illness is less than 3 days and Amber – may need to admit

Table 2 – Signs and Symptoms can include:

- Rhinorrhoea (Runny nose)
- Cough
- Poor Feeding
- Vomiting
- Pyrexia
- Respiratory distress
- Apnoea
- Inspiratory crackles +/- wheeze
- Cyanosis

When you feel a GP review in a specific time period is clinically appropriate but that falls outside of the 'in hours' GP service please advise your patient/family to call NHS 111 (at an agreed time interval / level of deterioration – depending on your concerns) and advise that there is a 'predetermined plan to speak with an Out of Hours GP'. Please provide your patient / family with a letter detailing your clinical findings and concerns to help the Out of Hours GP assessment.

This guidance is written in the following context

This assessment tool was arrived at after careful consideration of the evidence available including but not exclusively *SIGN, EBM data and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Bronchiolitis Advice Sheet – Babies/Children under 2 years

Name of Child ..... Age ..... Date / Time advice given .....

Further advice / Follow up .....

.....

Name of Professional ..... Signature of Professional .....

How is your child?

Red

- Blue lips
- Unresponsive and very irritable
- Finding it difficult to breathe
- Pauses in breathing or irregular breathing pattern

You need urgent help
please phone 999 or go to the nearest Accident and Emergency Department

Amber

- Decreased feeding
- Passing less urine than normal
- Baby/child's health gets worse or you are worried
- If your baby/child is vomiting
- Your baby/child's temperature is above 39°C

You need to contact a doctor or nurse today
please ring your GP surgery or call NHS 111 – dial 111

Green

- If none of the above factors are present

Self Care
Using the advice overleaf you can provide the care your child needs at home

Some useful phone numbers and information

GP Surgery
(make a note of number here)

NHS 111
dial 111
available 24 hrs – 7 days a week

Shropshire Walk-in Centre
Located next to A&E at
Royal Shrewsbury Hospital
Open from 8am to 8pm,
7 days a week including bank holidays

For online advice: NHS Choices www.nhs.uk (available 24 hrs – 7 days a week)

If you need language support or translation please inform the member of staff to whom you are speaking.

For more copies of this document, please email; shrccg.communicationsteam@nhs.net

Or visit Shropshire CCG Website http://www.shropshireccg.nhs.uk/health-advice/self-care/

Bronchiolitis Advice Sheet – Babies/Children under 2 years

What is Bronchiolitis?

Bronchiolitis is an infectious disease when the tiniest airways in your baby/child's lungs become swollen. This can make it more difficult for your baby/child to breathe. Usually, bronchiolitis is caused by a virus. It is common in winter months and usually only causes mild cold like symptoms. Most babies/children get better on their own. Some babies/children, especially very young ones, can have difficulty with breathing or feeding and may need to go to hospital.

What are the symptoms?

- Your baby/child may have a runny nose and sometimes a temperature and a cough. After a few days your baby/child's cough may become worse.
- Your baby/child's breathing may be faster than normal and it may become noisy. He or she may need to make more effort to breathe.
- Sometimes, in the very young babies, Bronchiolitis may cause them to have brief pauses in their breathing. If you are concerned see the amber box overleaf.
- As breathing becomes more difficult, your baby may not be able to take the usual amount of milk by breast or bottle.
- You may notice fewer wet nappies than usual.
- Your baby/child may vomit after feeding and become irritable.

How can I help my baby?

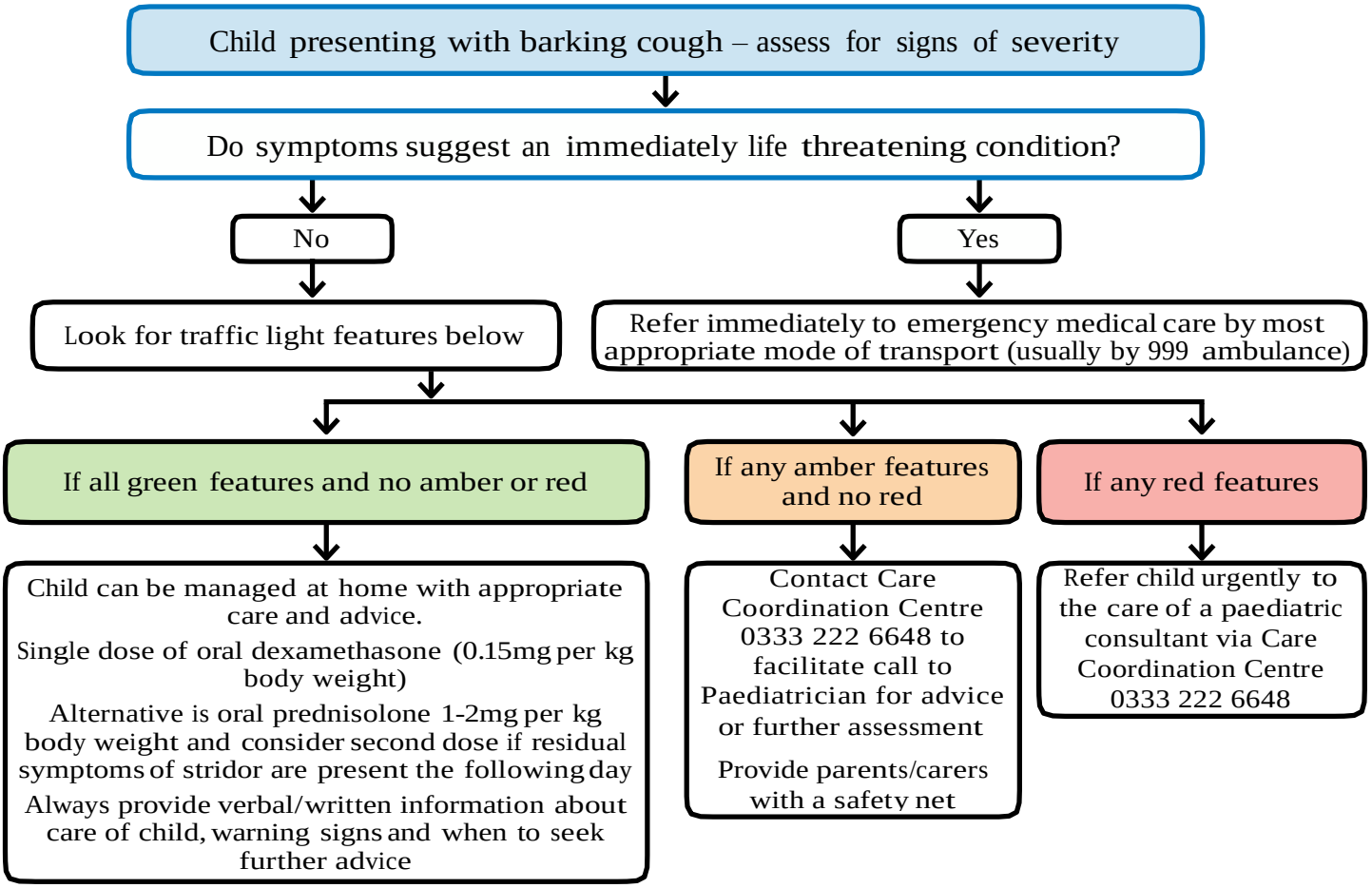
- If your baby/child is not feeding as normal offer feeds little and often.
- If your baby/child has a fever, you can give him or her paracetamol in the recommended doses. If your child is older than 6 months old you may also give Ibuprofen.
- If your baby/child is already taking medicines or inhalers, you should carry on using these. If you find it difficult to get your baby/child to take them, ask your doctor for advice.
- Bronchiolitis is caused by a virus so antibiotics won't help.
- Make sure your baby/child is not exposed to tobacco smoke. Passive smoking can seriously damage your baby/child's health. It makes breathing problems like bronchiolitis worse.
- Remember smoke remains on your clothes even if you smoke outside.

How long does Bronchiolitis last?

- Most babies/children with bronchiolitis get better within about two weeks.
- Your baby/child can go back to nursery or day care as soon as he or she is well enough (that is feeding normally and with no difficulty in breathing).
- There is usually no need to see your doctor if your baby/child is recovering well. But if you are worried about your baby/child's progress, contact NHS 111 or discuss this with your doctor.

Clinical Assessment Tool

Suspected Croup in child 3 months – 6 years



	Green	Amber	Red
Colour	Normal	–	Pale Lethargy
Activity	Child alert	Quieter than normal	Distress/agitation
Respiratory	Respiratory rate ⌘ Under 12 months <50 breaths/minute ⌘ Over 12 months <40 breaths/minute Sats 95% or above	Respiratory rate ⌘ Under 12 months 50-60 breaths/minute ⌘ Over 12 months 40-60 breaths/minute Sats 92 - 94%	Respiratory rate >60 (all ages) Sats <92%
Cough	Occasional barking cough No stridor	Frequent barking cough and stridor	Struggling with persistent cough
Chest recession	No chest recession	Subcostal and retrosternal recession	Marked subcostal and retrosternal recession
Circulation and hydration	CRT < 2 seconds		
		Poor response to initial treatment Reduced fluid intake Uncertain diagnosis Significant parental anxiety, late evening/night presentation. No access to transport or long way from hospital	

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Croup Advice Sheet

Name of Child ..... Age ..... Date / Time advice given .....

Further advice / Follow up .....

.....

Name of Professional ..... Signature of Professional .....

How is your child?

Red

- Blue lips
- Unresponsive and very irritable
- Finding it difficult to breathe with heaving of chest
- Pauses in breathing or irregular breathing patterns

You need urgent help
please phone 999 or go to the nearest Accident and Emergency Department

Amber

- Not improving with treatment
- Breathing more noisy
- Breathing more laboured (chest 'indrawing')
- Persisting fevers of over 39 degrees centigrade

You need to contact a doctor or nurse today
please ring your GP surgery or call NHS 111 – dial 111

Green

- If none of the above

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Using the advice overleaf you can provide the care your child needs at home

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Croup Advice Sheet – Babies/Children under 2 years

What is Croup?

Croup is an inflammation of the voice box characterised by a typical dry barking cough and sometimes leading to difficulty in breathing.

The condition most often affects small children. It is usually caused by a virus and occurs in epidemics particularly in the autumn and early spring.

Symptoms start with a mild fever and a runny nose. This progresses to a sore throat and a typical barking cough. Young children have smaller air passages and inflammation in the voice box leads to the gap between the vocal cords being narrowed. This may obstruct breathing, particularly when breathing in (stridor), which often starts in the middle of the night.

Croup develops over a period of one or two days, the severity and time that it persists varies, but often symptoms are worse on the second night of the cough

Croup is usually caused by a virus and for that reason antibiotics are not normally effective.

How can I help my child?

- Be calming and reassuring. A small child may become distressed with croup. Crying can make things worse.
- Sit the child upright on your lap if their breathing is noisy or difficult. Let the child find a comfortable position.
- Give the child lots of cool drinks (if they are happy to take them).
- A cool environment such as taking your child outside at night for a brief period may help
- Lower the fever. If a child has a fever (high temperature) their breathing is often faster, and they may be more agitated and appear more ill. To lower a fever:
  - Give paracetamol or ibuprofen.
  - Lightly dress the child if the room is not cold.

Be aware

Steam used to be commonly advised as a treatment. It was thought that steam may loosen the mucus and make it easier to breathe. However, there is little evidence that this does any good. Also, some children have been scalded by steam whilst being treated for croup. Therefore, steam is not recommended. Also, DO NOT make a child with breathing difficulty lie down or drink fluids if they don't want to, as that could make breathing worse.

Clinical Assessment Tool

Child with fever

Child presenting with fever – assess for signs of severity

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

No

Look for traffic light features and symptoms and signs of specific diseases (pages 11, 12)
Document temperature, heart rate, respiratory rate, capillary refill time, colour, activity and hydration status

Yes

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

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

Remember to check urine in unexplained fever

If any amber features and no diagnosis reached

Look for symptoms and signs of specific diseases
Provide parents/carers with a safety net, consider review appointment at appropriate interval or
Contact Care Coordination Centre 0333 222 6648 to facilitate call to Paediatrician for advice or further assessment
If remotely assessed then arrange assessment in face to face setting

If any red features

Administer parenteral antibiotics if meningococcal disease suspected and refer urgently to hospital

Refer child urgently to the care of a paediatric specialist via Care Coordination Centre 0333 222 6648

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

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Traffic light system for identifying risk of serious illness

	Green – low risk	Amber – intermediate risk	Red – high risk
Colour	⌘ Normal Colour of skin, lips and tongue	⌘ Pallor reported by parent/carer	⌘ Pale/mottled/ashen/blue
Activity	⌘ Responds normally to social cues ⌘ Content/smiles ⌘ Stays awake or awakens quickly ⌘ Strong normal cry/not crying	⌘ Not responding normally to social cues ⌘ Wakes only with prolonged stimulation ⌘ Decreased activity ⌘ No smile	⌘ No response to social cues ⌘ Appears ill to a healthcare professional ⌘ Unable to rouse or if roused does not stay awake ⌘ Weak, high-pitched or continuous cry
Respiratory		⌘ Nasal flaring ⌘ Tachypnoea: - RR > 50 breaths/minute age 6 - 12 months - RR > 40 breaths/minute age > 12 months ⌘ Oxygen saturation < 95% in air ⌘ Crackles in the chest	⌘ Grunting ⌘ Tachypnoea: - RR > 60 breaths/minute
Circulation and Hydration	⌘ Normal skin and eyes ⌘ Moist mucous membranes	⌘ Dry mucous membrane ⌘ Poor feeding in infants ⌘ CRT > 3 seconds ⌘ Tachycardia >160 beats/minute age < 1year >150 beats/minute age 1 - 2 years >140 beats/minute age 2 - 5 years ⌘ Reduced urine output	⌘ Reduced skin turgor
Other	⌘ None of the amber or red symptoms or signs	⌘ Fever for > 5 days ⌘ Swelling of a limb or joint ⌘ Non-weight bearing/not using an extremity ⌘ A new lump > 2 cm ⌘ Age 3-6 months, temperature > 39°C ⌘ Rigors	⌘ Age 0-3 months, temperature > 38°C ⌘ Non-blanching rash ⌘ Bulging fontanelle ⌘ Neck stiffness ⌘ Status epilepticus ⌘ Focal neurological signs ⌘ Focal seizures

CRT: capilary refill time

RR: respiratory rate

Symptoms and signs of specific illnesses

Always check urine in unexplained fever

If meningococcal disease is suspected then administer parenteral antibiotics and refer urgently to hospital

Diagnosis to be considered	Symptoms and signs in conjunction with fever
Meningococcal disease	Non-blanching rash, particulary with one or more of the following: ⌘ An ill-looking child ⌘ Lesions larger than 2 mm in diameter (purpura) ⌘ CRT > 3 seconds ⌘ Neck stiffness
Meningitis[1]	Neck stiffness ⌘ Bulging 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 - RR > 60 breaths/minute - 6-12 months - RR > 50 breaths/minute - > 12 months - RR > 40 breaths/minute ⌘ Crackles in the chest ⌘ Nasal flaring ⌘ Chest indrawing ⌘ Cyanosis ⌘ Oxygen saturation < 95%
Urinary tract infection (in children aged older than 3 months)[2]	⌘ Vomiting ⌘ 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 disease[3]	Fever lasting longer than 5 days and at least four of the following: ⌘ Bilateral conjunctival 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

RR: respiratory rate

[1] Classical signs (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, publication August 2007).

[3] Note: in rare cases, incomplete/atypical Kawasaki disease may be diagnosed with fewer features.

Fever advice for children and young people in Shropshire

What is a fever?

A fever is an increase in body temperature. This in itself is not dangerous. Your child's body temperature is normally between 36˚C and 37˚C, variations between 0.5 and 1 degree are common.

Fevers in children are not uncommon. This leaflet provides advice on when to seek help and on what you can do to help your child feel better. Often the fever lasts for a short duration and many children can be cared for at home if the child continues to drink, remains alert and does not develop any worrying symptoms.

However, if you are worried or your child is getting worse with warning symptoms as listed in this leaflet, then you should seek the advice of a healthcare professional.

Working out the cause of the fever

If you are talking to a healthcare professional on the telephone, they will ask you questions about your child's health and symptoms. This will help them to decide if your child is best cared for at home or needs to see a healthcare professional face to face.

Sometimes your healthcare professional will not find a reason for your child's fever, even after a full examination. If your child is otherwise looking well, then treatment may not be necessary.

Most children can be safely cared for at home if otherwise well. Your healthcare professional may decide that your child needs a follow-up appointment. They will give you information on how to look for symptoms that may suggest more serious illnesses and how to get further help if they occur.

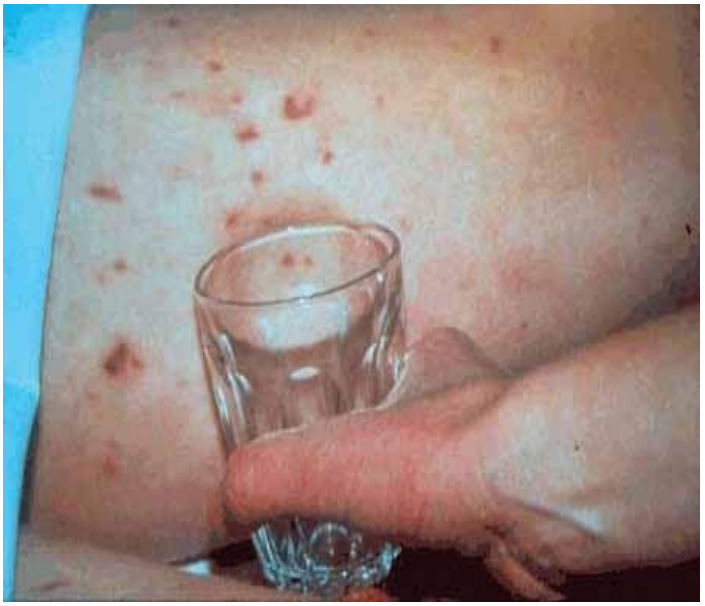
Looking after your feverish child

- Give your child plenty of drinks e.g. water or squash. If you are breastfeeding then continue as breast milk is best.
  Give babies smaller but more frequent feeds to help keep them hydrated.
- Do not worry about food if your child does not feel like eating but encourage them to drink more fluids.
- Look for signs of dehydration such as a dry mouth, lack of tears, sunken eyes, sunken fontanelle – the soft spot on your baby's head, passing less amounts of urine.
- Children with a fever should not be over or underdressed. If your child is shivering or sweating a lot, change the amount of clothes they are wearing.
- Physical methods of cooling your child such as fanning them, cold bathing and tepid sponging can cause discomfort and are not advised.
- It is not necessary to use medicines to treat your child's fever but if your child is distressed, you can help them feel better by giving them medicines like paracetamol or Ibuprofen. These medicines should not be given together. Always follow the instructions on the bottle to avoid overdosing your child. These medicines can make your child feel more comfortable but they do not treat the cause of the temperature.
- Check on your child regularly, including during the night, especially if your child is under 6 months old as they are at higher risk of serious infection.
- Keep your child away from nursery or school whilst they have a fever.

The tumbler test

- If a rash appears, do the tumbler test.
  Press a glass tumbler firmly against the rash. If you can see spots through the glass and they do not fade, this is called a 'non blanching rash'. If this rash is present, seek medical advice immediately to rule out serious infection.
  The rash is harder to see on dark skin so check paler areas such as the palms of hands and soles of feet.

This guide will help you to select the right service to contact. You need to regularly check your child and follow the advice below:



- If your child becomes unresponsive
- If your child becomes blue
- If your child is finding it hard to breathe
- If your child has a fit
- If your child develops a rash that does not disappear with pressure (see the tumbler test)

You need urgent help please phone 999 or go straight to the nearest Accident and Emergency Dept.

- If your child's health gets worse or if you are worried
- If your child has signs of dehydration including dry mouth, no tears, sunken eyes, sunken fontanelle (soft spot on the baby's head), drowsiness and seems generally unwell
- The temperature lasts more than 5 days and your child has not seen a health care professional
- If your child is less than 6 months old

You need to see a nurse or doctor today. Please ring your surgery/health visitor/ community nurse/Shropshire Walk-in Centre or contact NHS111 by dialing 111 for access to the Out of Hours GP service.

If you have concerns about looking after your child at home

If you need advice
please contact NHS 111
Please phone 111

Useful Information

GP Surgery

Shropshire Public Health Nursing Service
General Contact Number: 0333 358 3654

Shropshire Walk-in Centre
Located next to A&E at
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Open from 8am to 8pm,
7 days a week including bank holidays

NHS 111:
Dial 111 24 hour telephone service

Sepsis advice sheet

What is Sepsis?

- Sepsis is a rare but serious medical condition that results from the body's overwhelming response to an infection.
- Sepsis can occur in anyone at any time and from any type of infection affecting any part of the body.
- Without quick and timely treatment, sepsis can lead to septic shock, multi-organ failure and death.

Causes of Sepsis

Sepsis is most often caused by bacterial, viral or fungal infections; sometimes the cause of sepsis is never identified.
Children with pneumonia, urinary tract infections, meningitis and severe skin infections can rapidly deteriorate and develop sepsis.
It is important to recognise and act quickly on the symptoms of sepsis in order to reduce morbidity and mortality.

Look out for the signs of Sepsis

A raised temperature (fever) in children is common, but can be worrying. Almost all children will recover quickly and without problems. However, a very small proportion may have a serious infection with sepsis (bloodstream infection) that requires urgent treatment in hospital.

This information is designed to help you monitor your child's condition if they have a raised temperature, so you know when to ask for help and can describe the symptoms.

Just tick off any of those symptoms that you observe with a note of the date and time, and follow the advice at the top of the page.

For ease of use, the symptoms are split into:

Amber, where medical advice should be asked for

Red, which means you should get the child to hospital quickly – dial '999' if necessary and ask for an ambulance.

Again, we must stress that the great majority of children do not have sepsis. **But if you do have concerns and your child seems to be getting worse, even if their temperature falls, act swiftly just in case.**

Find out more

Detailed information can be found on the NICE website: www.nice.org.uk/Guidance/CG160
The UK Sepsis Trust also has a lot of helpful material at: www.sepsistrust.org
Email: info@sepsistrust.org **Phone:** 0845 606 6255

Amber (intermediate risk: ask for advice)

Some (but not all) children with these symptoms are seriously unwell. If you have any concerns, a trained health professional needs to assess them promptly. Contact your GP, NHS 111 or minor injuries unit.

	time/date	time/date	time/date
Skin, lips and tongue			
Unusually pale			
Rash that fades when pressed firmly (use a clear glass)			
Activity			
Not responding normally to family or carers			
Not smiling			
Difficult to wake up or unusually sleepy			
Not wanting to do very much			
Breathing			
Nostrils are flaring			
Fast breathing			
Unusually noisy or crackly breathing			
Cough that sounds like a seal barking			
Circulation			
Cold hands and feet			
Temperature and body			
Shivering or shaking			
Raised temperature for 5 days or more			
Swelling of a limb or joint			
Not using/putting weight on an arm, leg, hand or foot			
Aged 3-6 months with temperature of 39°C or above			
Vomiting, diarrhoea and hydration			
Under 1 year of age – vomiting and/or diarrhoea			
More than 5 watery poos in the last 24 hours			
Has vomited more than twice in last 24 hours			
Not feeding or eating much			
Dry mouth			
Only one wet nappy or wee in 12 hours			

NOTES

Red (high risk: take immediate action)

Many (but not all) children with these features are seriously unwell and need to be assessed straight away in hospital. Dial '999' for an ambulance if necessary.

Skin, lips and tongue	
Very pale or blue skin and sunken eyes	☐
Rash that does not fade when pressed firmly (use a clear glass)	☐
Activity	
Not responding to carers	☐
Very difficult to wake up	☐
Weak, high-pitched or continuous cry in younger children	☐
Older children are confused or unusually irritable	☐
Breathing	
Finding it much harder to breathe than normal	☐
Grunting breathing	☐
Very fast breathing: more than 60 breaths a minute	☐
Noticeable pauses in breathing	☐
Circulation	
Very cold hands and feet	☐
Temperature and body	
Under 3 months with raised temperature over 38°C	☐
The soft spot on an infant's head is bulging	☐
Stiff neck, especially when trying to look up and down	☐
The child has a seizure	☐
Vomiting, diarrhoea and hydration	
Very thirsty and not able to keep fluids down	☐
Bloody or black 'coffee ground' vomit	☐
Not had a wee for 12 hours	☐

Notes

Clinical Assessment Tool

Child with Suspected Gastroenteritis 0-5 years

Child presenting with diarrhoea and vomiting
Assess for signs of dehydration, see table 1 below (consider Boxes 1 and 2 overleaf)

If all green features and no amber or red	If any amber features and no red	If any red features
No clinical dehydration	Clinical Dehydration	Clinical shock suspected or confirmed
Preventing Dehydration: • Continue breastfeeding and other milk feeds. • Encourage fluid intake. • Discourage fruit juices and carbonated drinks (especially those children in Box 2) • Offer Oral Rehydration solution (ORS) as supplemental fluid to those at increased risk of dehydration (Box 2) • Refer to Box 4 for stool microbiology advice.	Depending on severity of child and social circumstances in this category based on clinical judgement (Consider Box 2) If these is blood or mucus in the stool or a suspicion of septicaemia or if the child is immunocompromised discuss with the Paediatric consultant on 0333 222 6648 *Home with advice to give oral rehydration solution over 4 hours without delay, often and in small amounts. See p.20 for details. *Continue breastfeeding. *Consider supplementing with usual fluids (including milk feeds/water, but not fruit juices or carbonated drinks. *If after 2 hours child is not tolerating ORS/ vomiting parents should be instructed to attend A&E Refer to Box 4 for stool microbiology advice *Give advice sheet	Send child for urgent assessment in hospital setting via Care Coordination Centre 0333 222 6648. Commence relevant treatment to stabilise baby/child for transfer if appropriate. Consider appropriate transport means (999) *Consider admission according to clinical and social circumstance. *Seek further advice (or refer to) Paediatric consultant via Care Coordination Centre 0333 222 6648. *En-route Parents should be encouraged to give child fluids often and in small amounts (including milk feeds/water, but not fruit juices or carbonated drinks)
Provide parents/carers with advice. Follow up by arranging a review by an appropriate health care professional. Direct to local numbers overleaf.		

Traffic light system for identifying signs and symptoms of clinical dehydration and shock

	Green – low risk	Amber – intermediate risk	Red – high risk
Activity	⌘ Responds normally to social cues ⌘ Content/Smiles ⌘ Stays awake/awakens quickly ⌘ Strong normal cry/not crying	⌘ Altered response to social cues ⌘ Decreased activity ⌘ No smile	⌘ Not responding normally to or no response to social cues ⌘ Appears ill to a healthcare professional ⌘ Unable to rouse or if roused does not stay awake ⌘ Weak, high-pitched or continuous cry
Skin	⌘ Normal skin colour ⌘ Normal turgour	⌘ Normal skin colour ⌘ Warm extremeties	⌘ Pale/Mottled/Ashen blue ⌘ Cold extremeties
Respiratory	⌘ Normal breathing	⌘ Tachypnoea (ref to normal values table 3)	⌘ Tachycardic (ref to normal values table 3)
Hydration	⌘ CRT≤2 secs ⌘ Moist mucous membranes (except after a drink) ⌘ Normal urine	⌘ CRT 2–3 secs ⌘ Dry mucous membrances (except after a drink) ⌘ Reduced urine output	⌘ CRT >3 seconds
Pulses/ Heart Rate	⌘ Heart rate normal ⌘ Peripheral pulses normal	⌘ Tachycardic (ref to normal values table 3) ⌘ Peripheral pulses weak	⌘ Tachycardic (ref to normal values table 3) ⌘ Peripheral pulses weak
Blood Pressure	⌘ Normal (ref to normal values table 3)	⌘ Normal (ref to normal values table 3)	⌘ Hypotensive (ref to normal values table 3)
Eyes	⌘ Normal Eyes	⌘ Sunken Eyes	

CRT:capillary refill time RR: respiration rate

Box 1 Consider the following that may indicate diagnoses other then gastroenteritis:

- ⌘ Temperature of 38°C or higher (younger than 3 months)
- ⌘ Temperature of 39°C or higher (3 months or older)
- ⌘ Shortness of breath or tachypneoa
- ⌘ Altered concious state
- ⌘ Neck-stiffness
- ⌘ Abdominal distension or rebound tenderness
- ⌘ History/Suspicion of poisoning
- ⌘ Bulging fontanele (in infants)
- ⌘ Non-blanching rash
- ⌘ Blood and/or mucus in stool
- ⌘ Bilious (green) vomit
- ⌘ Severe or localised abdominal pain
- ⌘ History of head injury

Box 2 These children are at increased risk of dehydration:

- ⌘ Children younger than 1 year, especially those younger than 6 months
- ⌘ Infants who were of a low birth weight
- ⌘ Children who have passed six or more diarrhoeal stools in the past 24 hours.
- ⌘ Children who have vomited three times or more in the last 24 hours.
- ⌘ Children who have not been offered or have not been able to tolerate supplementary fluids before presentation.
- ⌘ Infants who have stopped breastfeeding during the illness.
- ⌘ Children with signs of malnutrition.

Box 3 Normal Paediatric Values:

Mean Respiratory Rate:	**Mean Heart Rate:**
Infant: 40	Infant: 120-170 bpm
Toddler: 35	Toddler: 80-110 bpm
Pre-School: 31	Pre-School: 70-110 bpm
School age: 27	School age: 70-110 bpm

Box 4 Stool Microbiology Advice:

Consider performing stool microbiological investigations if:

- ⌘ the child has recently been abroad or
- ⌘ the diarrhoea has not improved by day 7

Some Useful Telephone Numbers

Ensure the parent/carer has the number of their GP/Practice Nurse/ .....

Shropshire Public Health Nursing Service, General Contact Number: 0333 358 3654

Community Nurse .....

NHS Direct . Dial 111 24 hour telephone service

When you feel a GP review in a specific time period is clinically appropriate but that falls outside of the 'in hours' GP service please advise your patient/family to call NHS 111 (at an agreed time interval / level of deterioration – depending on your concerns) and advise that there is a 'predetermined plan to speak with an Out of Hours GP'. Please provide your patient / family with a letter detailing your clinical findings and concerns to help the Out of Hours GP assessment.

This guidance is written in the following context

This assessment tool was arrived at after careful consideration of the evidence available including but not exclusively *SIGN,Bristol guideline, EBM data and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

GP Fluid Challenge Guidelines

The table below gives the normal maintenance fluid volumes based on weight for mild to moderately dehydrated children. For the first 10kg of weight- 4ml/kg/hour, for the second 10kg – 2ml/kg/hr, for all remaining kg – 1ml/kg/hr. Aim for 75-100% of the fluid volumes listed below per hour when awake, given gradually over the hour via syringe. Fluid should be clear, ideally oral rehydration solutions eg dioralyte. If the child is breast-fed continue breastfeeding. Seek review if the patient

- Is not taking fluids
- Is not keeping fluids down
- Is becoming more unwell
- Has reduced urine output

If the assessment shows "Red" features refer patient to PAU.

Child's weight in kg	Maintenance fluid volume – ml per hour
2	8
3	12
4	16
5	20
6	24
7	28
8	32
9	36
10	40
11	42
12	44
13	46
14	48
15	50
16	52
17	54
18	56
19	58
20	60
21	61
22	62
23	62
24	64
25	65
26	66
27	67
28	68
29	69
30	70

Child's weight in kg	Maintenance fluid volume – ml per hour
31	71
32	72
33	73
34	74
35	75
36	76
37	77
38	78
39	79
40	80
41	81
42	82
43	83
44	84
45	85
46	86
47	87
48	88
49	89
50	90
51	91
52	92
53	93
54	94
55	95
56	96
57	97
58	98
59	99

Children's Oral Fluid Challenge

Dear Parent / carer,

Your child needs to drink fluid in order to prevent dehydration.

Date .....

Name .....

ED Number/ HospitalNumber .....

NHSNumber.....

Dob.....

Weight .....

Please give your child ..... ml of the suggested fluid, measured using the syringe provided, and given by usual method of feeding every ten minutes.

You need to tick the boxes below each time your child has a drink, and also mark down if your child vomits or has diarrhoea. Show this chart to the Doctor when your child is seen.

Thank you.

Time	Fluid given (tick please)	Vomit or diarrhoea?

Gastroenteritis (Diarrhoea and/or Vomiting) Advice Sheet (0-5 years)

Name of Child ..... Age ..... Date / Time advice given .....

Further advice / Follow up .....

Name of Professional ..... Signature of Professional .....

How is your child? (traffic light advice)

Red

If your child:

- becomes difficult to rouse / unresponsive
- becomes pale and floppy
- is finding it difficult to breathe
- has cold feet and hands
- has diabetes

You need urgent help
please phone 999 or go to the nearest Hospital Emergency (A&E) Department

Amber

If your child:

- seems dehydrated: ie. dry mouth, sunken eyes, no tears, sunken fontanelle (soft spot on baby's head), drowsy or passing less urine than normal
- has blood in the stool (poo) or constant tummy pain
- has stopped drinking or breastfeeding and / or is unable to keep down
- becomes irritable or lethargic
- their breathing is rapid or deep
- is under 3 months old

You need to contact a doctor or nurse today
please ring your GP surgery or call NHS 111 – dial 111

Green

If none of the above features are present, most children with Diarrhoea and / or Vomiting can be safely managed at home.

(However some children are more likely to become dehydrated including: children younger than 1 year old or if they had a low birth weight. In these cases or if you still have concerns about your child please contact your GP surgery or call NHS 111)

Self Care
Using the advice overleaf you can provide the care your child needs at home

Most children with diarrhoea and / or vomiting get better very quickly, but some children can get worse. You need to regularly check your child and follow the advice given to you by your healthcare professional and / or as listed on this sheet.

Some useful phone numbers and information

GP Surgery
(make a note of number here)

NHS 111
dial 111
available 24 hours – 7 days a week

Shropshire Walk-in Centre
Located next to A&E at
Royal Shrewsbury Hospital
Open from 8am to 8pm,
7 days a week including bank holidays

For online advice: NHS Choices www.nhs.uk (available 24 hours – 7 days a week)

If you need language support or translation please inform the member of staff to whom you are speaking.

For more copies of this document, please email; **shrccg.communicationsteam@nhs.net**

Or visit Shropshire CCG Website **http://www.shropshireccg.nhs.uk/health-advice/self-care/**

Gastroenteritis (Diarrhoea and/or Vomiting) Advice Sheet (0-5 years)

About Gastroenteritis

Severe diarrhoea and / or vomiting can lead to dehydration, which is when the body does not have enough water or the right balance of salts to carry out its normal functions. If the dehydration becomes severe it can be dangerous. Children at increased risk of dehydration include: young babies under 1 year old (and especially the under 6 months), those born at a low birth weight, those who have stopped drinking or breastfeeding during the illness and children with malnutrition or with faltering growth.

How can I look after my child?

- Diarrhoea can often last between 5 – 7 days and stops within 2 weeks. Vomiting does usually not last for more than 3 days. If your child continues to be ill longer than these periods, seek advice.
- Continue to offer your child their usual feeds, including breast or other milk feeds.
- Encourage your child to drink plenty of fluids – little and often. Water is not enough and ideally Oral Rehydration Solution (ORS) is best. ORS can be purchased over the counter at large supermarkets and pharmacies and can help prevent dehydration from occurring.
- Your healthcare professional may recommend that you give your child a special fluid known as Oral Rehydration Solution (ORS) eg. Dioralyte. It is also used to treat children who have become dehydrated.
- Mixing the contents of the ORS sachet in dilute squash (not "sugar-free" squash) instead of water may improve the taste.
- Do not worry if your child is not interested in solid food, but offer food if hungry. It is advisable not to give fizzy drinks and/or fruit juices as they can make diarrhoea worse.
- If your child has other symptoms like a high temperature, neck stiffness or rash please ask for advice from a health care professional.
- Your child may have stomach cramps; if simple painkillers do not help please seek further advice.
- If your child is due routine immunisations please discuss this with your GP or practice nurse, as they may not need to be delayed.
- **Hand washing is the best way to stop gastroenteritis spreading.**

Based on: Diarrhoea and vomiting in children under 5, 2009 NICE clinical guideline 84 *Reference: BNF for Children Volume 1.4.2 (Page 47)

First Version: May 2011 • Final Version: Nov 2013 • Review Date: Nov 2015

After Care

Once your child is rehydrated and no longer vomiting:

- Reintroduce the child's usual food.
- If dehydration recurs, start giving ORS again.
- Anti-diarrhoeal medicines (also called Antimotility drugs) should not be given to children*.

*Reference: BNF for Children Volume 1.4.2 (Page 47)

Preventing the spread of Gastroenteritis (diarrhoea and / or vomiting):

✓

You and/or your child should wash your hands with soap (liquid if possible) in warm running water and then dry them carefully:

- After going to the toilet
- After changing nappies
- Before touching food

✗

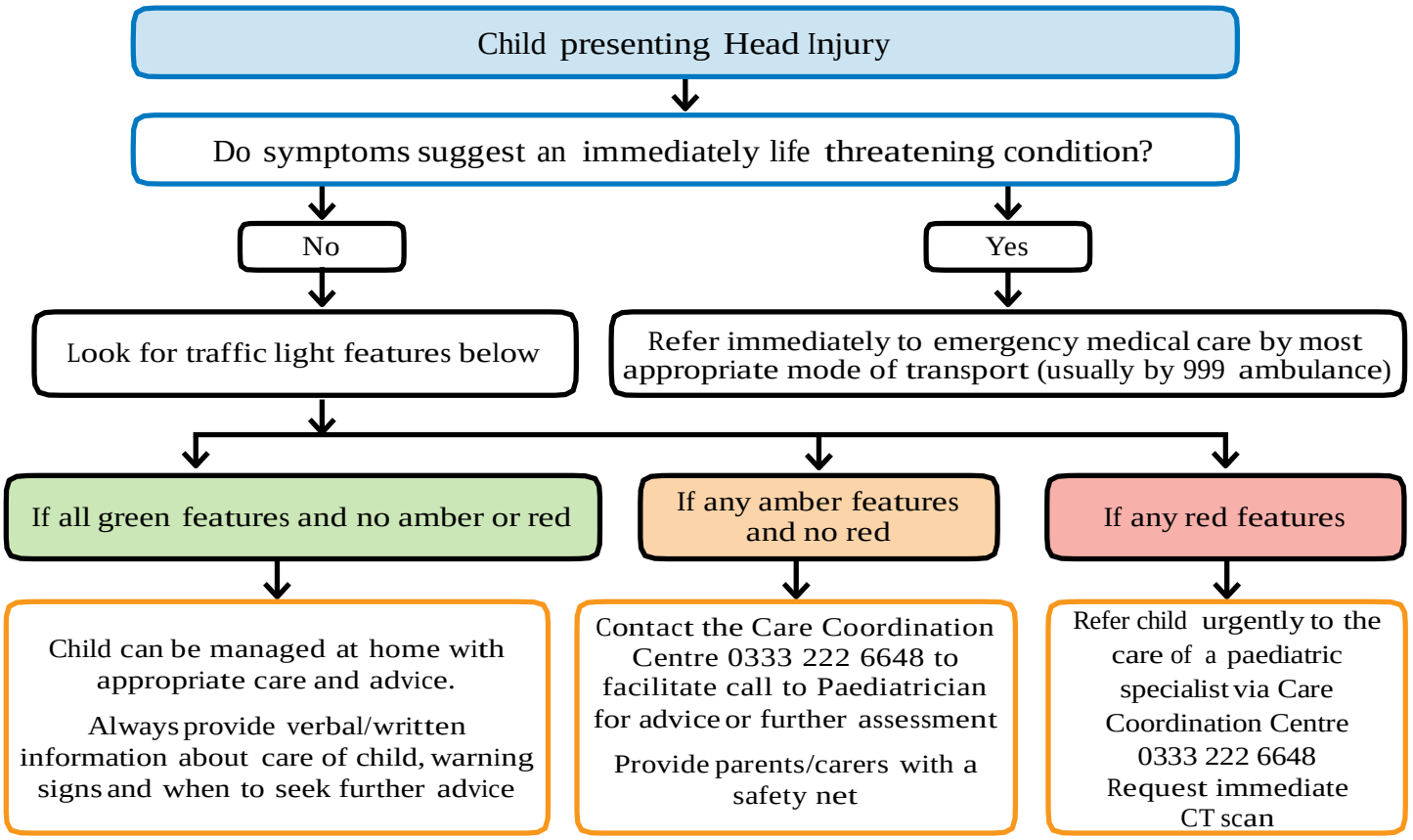
Your child should not:

- Share his or her towels with anyone
- Go to school or any other childcare facility until 48 hours after the last episode of diarrhoea and /or vomiting
- Swim in swimming pools until 2 weeks after the diarrhoea

This guidance is written in the following context: This document was arrived at after careful consideration of the evidence available including but not exclusively NICE, SIGN, EBM data and NHS evidence, as applicable. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient in consultation with the patient and / or carer.

Clinical Assessment Tool

Head Injury



Green	Amber	Red
Has not been knocked out at any time	Has fallen from a height greater than the child's own height	Witnessed loss of consciousness lasting more than 5 minutes
Is alert and interacts with you	Has fallen from a height greater than a metre	Amnesia lasting more than 5 minutes
Has been sick but only once	Has fallen down stairs	Abnormal drowsiness
Has bruising or minor cuts to the head	Has had a persistent headache since the injury	3 or more discrete episodes of vomiting
Cried immediately but is otherwise normal	Has a blood clotting disorder	Clinical suspicion on non-accidental injury
15 on GCS	Has consumed alcohol	Post traumatic seizure but no history of epilepsy
		Age > 1 year: GCS < 14 on assessment
		Age < 1 year: GCS (Paediatric) < 15 on assessment
		At 2 hours after the injury, GCS less than 15
		Suspicion of open or depressed skull injury or tense fontanelle
		For children under 1 year, presence of bruise, swelling or laceration of more than 5 cm on the head.
		Any sign of basal skull fracture (haemotympanum, "panda" eyes, cerebrospinal fluid leakage from ears or nose, Battle's sign)
		Focal neurological deficit
		Dangerous mechanism of injury (high speed road traffic accident, fall from >3m, high speed injury from a projectile or an object)

Glasgow Coma Scale – assess child against scale. The lowest possible GCS (the sum) is 3 (deep coma or death), while the highest is 15 (fully awake person).

	1	2	3	4	5	6
Eye	Does not open eyes	Opens eyes in response to painful stimuli	Opens eyes in response to voice	Opens eyes spontaneously	N/A	N/A
Verbal	Makes no sounds	Incomprehensible sounds	Utters inappropriate words	Confused, disoriented	Oriented, converses normally	N/A
Motor	Makes no movements	Extension to painful stimuli (decerebrate response)	Abnormal flexion to painful stimuli (decorticate response)	Flexion / Withdrawal to painful stimuli	Localizes painful stimuli	Obeys commands

When you feel a GP review in a specific time period is clinically appropriate but that falls outside of the 'in hours' GP service please advise your patient/family to call NHS 111 (at an agreed time interval / level of deterioration – depending on your concerns) and advise that there is a 'predetermined plan to speak with an Out of Hours GP'. Please provide your patient / family with a letter detailing your clinical findings and concerns to help the Out of Hours GP assessment.

This guidance is written in the following context

This assessment tool was arrived at after careful consideration of the evidence available including but not exclusively use BTS Guidelines and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Head Injury Advice Sheet

Name of Child ..... Age ..... Date / Time advice given .....

Further advice / Follow up .....

.....

Name of Professional ..... Signature of Professional .....

How is your child?

Red

- Has been "knocked out" at any time
- Been sick more than once
- Has clear fluid dribbling out of their ears, nose or both
- Has blood coming from inside one or both of their ears
- Has difficulty speaking or understanding what you are saying
- Is sleepy and you cannot get them to wake up
- Has weakness in their arms and legs or is losing their balance
- Has had a convulsion or fit

You need urgent help
please phone 999 or go to the nearest Accident and Emergency Department

Amber

- Has been deliberately harmed (abused)
- Has fallen from a height greater than the child's own height
- Has fallen from a height greater than a meter or a yard
- Is under 1 year old
- Has fallen down stairs (from top to bottom poses more risk than bumping down the stairs)
- Had a persistent headache since the injury
- Has a blood clotting disorder
- Has consumed alcohol

You need to contact a doctor or nurse today
please ring your GP surgery or call NHS 111 – dial 111

Green

- Has not been "knocked out "at any time
- Is alert and interacts with you
- Has been sick but only once
- Has bruising or minor cuts to the head
- Cried immediately but is otherwise normal

Self Care
Using the advice overleaf you can provide the care your child needs at home

Some useful phone numbers and information

GP Surgery
(make a note of number here)

NHS 111
dial 111
available 24 hours – 7 days a week

Shropshire Walk-in Centre
Located next to A&E at
Royal Shrewsbury Hospital
Open from 8am to 8pm,
7 days a week including bank holidays

For online advice: NHS Choices www.nhs.uk (available 24 hours – 7 days a week)

If you need language support or translation please inform the member of staff to whom you are speaking.

For more copies of this document, please email **shrccg.communicationsteam@nhs.net**

Head Injury Advice Sheet

Things that will help your child get better

If you follow this advice it should help your child get better more quickly and it may help any symptoms they have to go away.

- Do encourage your child to have plenty of rest and avoid stressful situations.
- Do not give them sleeping pills, sedatives or tranquilisers unless they are prescribed for your child by a doctor.

Self care

- Clean any wound with tap water.
- If the area is swollen or bleeding apply pressure.
- Give your child children's liquid paracetamol or ibuprofen if they are in pain. Always follow the manufacturers' instructions for the correct dose.
- Observe your child closely for the next 2-3 days and check that they are behaving normally and they respond to you as usual.
- If the area is swollen or bruised, try placing a cold facecloth over it for 20 minutes every3-4 hours.
- Make sure your child is drinking enough fluid – water is best, and lukewarm drinks can also be soothing.
- Keep the room they are in at a comfortable temperature, but well ventilated
- It is OK to allow your child to sleep, but observe them regularly and check they respond normally to touch and that their breathing and position in bed is normal.
- Give them plenty of rest, and make sure they avoid any strenuous activity for the next 2-3 days or until their symptoms have settled.
- You know your child best. If you are concerned about them you should seek further advice.

These things are expected after a head injury

- Intermittent headache especially whilst watching TV or computer games
- Being off their food
- Tiredness or trouble getting to sleep
- Short periods of irritability, bad temper or poor concentration

May last several weeks.

Do not let them play any contact sport (for example, football) for at least 3 weeks without talking to their doctor first.

Clinical Assessment Tool

Child with Acute Asthma 2-16 Years

Child presenting Suspected Acute Exacerbation of Asthma

Consider other diagnosis if any of the following are present:
- Fever
- Dysphagia
- Productive Cough
- Breathlessness with light headiness and peripheral tingling (hyperventilation)
- Asymmetry on
- Excessive vomiting
- Inspiratory Stridor

No → Suspected Acute Exacerbation of Asthma
Assess severity (ref Table 1):

Yes → It may not be Asthma:
Seek expert Help
(Consider use of another pathway)

If all green features and no amber or red

Moderate Exacerbation
- Give 2-10 puffs of ß agonist via a spacer (with a facemask in younger children using tidal breathing)
- Use patient own spacer where available
- Increase ß agonist dose by 2 puffs every 2 minutes upto 10 puffs according to response
- Consider an appropriate dose of soluble oral prednisolone (ref table 5)

Assess response

- Good Response (Green features)
- Deterioration? Consider if now amber/red

Good Response:
- Advise patient to continue using ß agonist via spacer as needed—but not exceeding 4 hourly.
- Give asthma discharge management advice leaflet.
- Continue Prednisolone for up to 3 days.
- Arrange asthma clinic follow up within 48hrs.
- Review inhaler technique

If any amber features and no red

Severe Exacerbation
- Give Oxygen via a facemask/nasal prongs to achieve Sp0 94-98%
- Give ß agonist 10 puffs via spacer ± facemask or nebulised salbutamol at an appropriate dose driven by oxygen (Ref Table 4)
- Give an appropriate dose of oral prednisolone (Ref Table 5)

- If symptoms are not controlled repeat ß agonist via oxygen driven nebuliser.
- Refer to hospital – consider ambulance +/- 999.
- Discuss with Paediatric Consultant Via Care Coordination Centre 0333 222 6648
- Stay with child until Ambulance arrives

If any red features

Life Threatening
- Give Oxygen via a facemask to achieve Sp0 94-98%
- Call 999 for an Emergency Ambulance
- Give Nebulised ß agonist and ipratropium at an appropriate dose driven by oxygen (Ref table 4)
- Give an appropriate dose of oral prednisolone (Ref Table 5)
- Repeat ß agonist up to every 20-30 minutes while waiting for ambulance to arrive
- Continually assess the child after each intervention.
- Ensure continuous oxygen delivery
- Stay with the child whilst waiting for ambulance to arrive

Lower threshold for admission if:
- Attack in late afternoon or at night
- Recent hospital admission or previous severe attack
- Concern over social circumstances or ability to cope at home

11.11.v01

Clinical Assessment Tool continued

Child with Acute Asthma 2-16 Years

Table 1: Traffic Light system for identifying signs and symptoms of clinical dehdration and shock

	Green – Moderate	Amber – Severe	Red – Life Threatening
Behaviour	Normal	Anxious/Agitated	Exhaustion/Confusion
Talking	In sentences	Not able to complete a sentence in one breath	Not able
Heart Rate	Within normal range (Ref to table 2)	>140 beats p/min (2-5 years) >125 beats p/min (>5 years) *Consider influence of fever &/or Salbutamol	
Respiratory	<40 breaths/min 2-5 years <30 breaths/min 5-12 years <25 breaths/min 12-16 years	Rate>40 Breaths/min 2-5 years Rate>30 Breaths/min >5 years Silent Chest	
Sa02	≥92% in air	<92% in air	
PEFR	>50% of predicted (Ref to table 3)	33-50% of predicted (Ref to table 3)	<33% of predicted (Ref to table 3)

CRT: capillary refill time RR: respiration rate

Table 2: Normal Paediatric Values:

Respiratory Rate at Rest:	Systolic Blood Pressure
2-5yrs 25-30 breaths/min	2-5yrs 80-100 mmhg
5-12yrs 20-25 breaths/min	5-12yrs 90-110 mmhg
>12yrs 15-20 breaths/min	>12yrs 100-120 mmhg

Heart Rate

2-5yrs 95-140 bpm

5-12yrs 80-120 bpm

>12yrs 60-100 bpm

Table 3: Predicted Peak Flow: For use with EU / EN13826 scale PEF metres only

Height (m)	Height (ft)	Predicted EU PEFR	Height (m) (L /min)	Height (ft)	Predicted EU PEFR (L/min)
0.85	2'9"	87	1.30	4'3"	212
0.90	2'11"	95	1.35	4'5"	233
0.95	3'1"	104	1.40	4'7"	254
1.00	3'3"	115	1.45	4'9"	276
1.05	3'5"	127	1.50	4'11"	299
1.10	3'7"	141	1.55	5'1"	323
1.15	3'9"	157	1.60	5'3"	346
1.20	3'11"	174	1.65	5'5"	370
1.25	4'1"	192	1.70	5'7"	393

Table 4: Guidelines for nebuliser

- Significantly low sats despite inhaler and spacer use
- Oxygen Saturations persistently below 96%
- Requiring oxygen
- Unable to use volumatic/spacer device
- Severe respiratory dmistress

Salbutomol

2-5 years– 2.5mg, 5-12 years– 2.5-5mg, 12-16 years– 5mg

Ipratropium

under 12 years – 250micrograms,
12-18 years – 500micrograms

Table 5: Prednisolone Guideline BNF2010-2011

Give prednisolone by mouth:

child under 12 years 1–2 mg/kg (max. 40 mg) daily for up to 3 days or longer if necessary, if the child has been taking an oral corticosteroid for more than a few days give prednisolone 2mg/kg (max. 60mg). Child12-18 years 40-50mg daily for at least 5 days.

BTS guidelines 2011: (if weight not available)
Use a dose of 20mg for children 2-5 years and 30-40mg for children >5years.

When you feel a GP review in a specific time period is clinically appropriate but that falls outside of the 'in hours' GP service please advise your patient/family to call NHS 111 (at an agreed time interval / level of deterioration – depending on your concerns) and advise that there is a 'predetermined plan to speak with an Out of Hours GP'. Please provide your patient / family with a letter detailing your clinical findings and concerns to help the Out of Hours GP assessment.

Asthma Advice Sheet

Name of Child ..... Age ..... Date / Time advice given .....

Further advice / Follow up .....

.....

Name of Professional ..... Signature of Professional .....

How is your child?

Red

- Drowsy
- Has severe wheeze
- Unable to speak in sentences
- Unable to take fluids and is getting tired
- Is unable to respond with loss in consciousness
- Breathless, with heaving of the chest

You need urgent help
Ring 999 – you need help immediately. If you have a blue inhaler use it now, 1 puff per minute via spacer until the ambulance arrives.

Amber

- Wheezing and breathless
- Not responding to usual reliever treatment

You need to see or speak to a doctor or nurse today
Please ring your GP surgery or call NHS 111 – dial 111

Green

- Requiring to use their reliever regularly throughout the day for cough or wheeze but is not breathing quickly
- Able to continue day to day activities
- Change in peak flow meter readings

You need to see a doctor or nurse to discuss your child's asthma.
Please ring for a non urgent appointment.

Some useful phone numbers and information

GP Surgery
(make a note of number here)

NHS 111
dial 111
available 24 hours – 7 days a week

Shropshire Walk-in Centre
Located next to A&E at
Royal Shrewsbury Hospital
Open from 8am to 8pm,
7 days a week including bank holidays

For online advice: NHS Choices www.nhs.uk (available 24 hours – 7 days a week)

Asthma UK website www.asthma.org.uk/advice/child/

If you need language support or translation please inform the member of staff to whom you are speaking.

For more copies of this document, please email: shrccg.communicationsteam@nhs.net

Or visit Shropshire CCG Website http://www.shropshireccg.nhs.uk/health-advice/self-care/

Asthma Advice Sheet – self care

What is asthma?

Asthma is caused by inflammation of the airways. These are the small tubes, called bronchi, which carry air in and out of the lungs. If you have asthma, the bronchi will be inflamed and more sensitive than normal.

Asthma can start at any age, but it most commonly starts in childhood. At least 1 in 10 children, and 1 in 20 adults, have asthma.

In an asthma attack the muscles of the air passages in the lungs go into spasm and the linings of the airways swell. As a result, the airways become narrowed and breathing becomes difficult.

What causes asthma in children?

In young pre-school children, wheezing is usually brought on by a viral infection – causing a cold, ear or throat infection. Some people call this 'viral-induced wheeze' or 'wheezy bronchitis', whilst others call it asthma. Most children will grow out of it, as they get to school age.

In older children, viruses are still the commonest cause of wheezing. But other specific triggers may also cause an asthma attack such as:

- an allergy eg animals
- pollens and mould particularly in hayfever season
- cigarette smoke
- extremes of temperature
- stress
- exercise (However, sport and exercise are good for you if you have asthma. If necessary, an inhaler can be used before exercise to prevent symptoms from developing)

Your child MAY BE having an asthma attack if any of the following happens:

- Their reliever isn't helping or lasting over four hours
- Their symptoms are getting worse (cough, breathlessness, wheeze or tight chest
- They are too breathless or it's difficult to speak, eat or sleep
- Their breathing may get faster and they feels like they can't get your breath in properly
- Young children may complain of a tummy ache.

What to do if your child has an asthma attack:

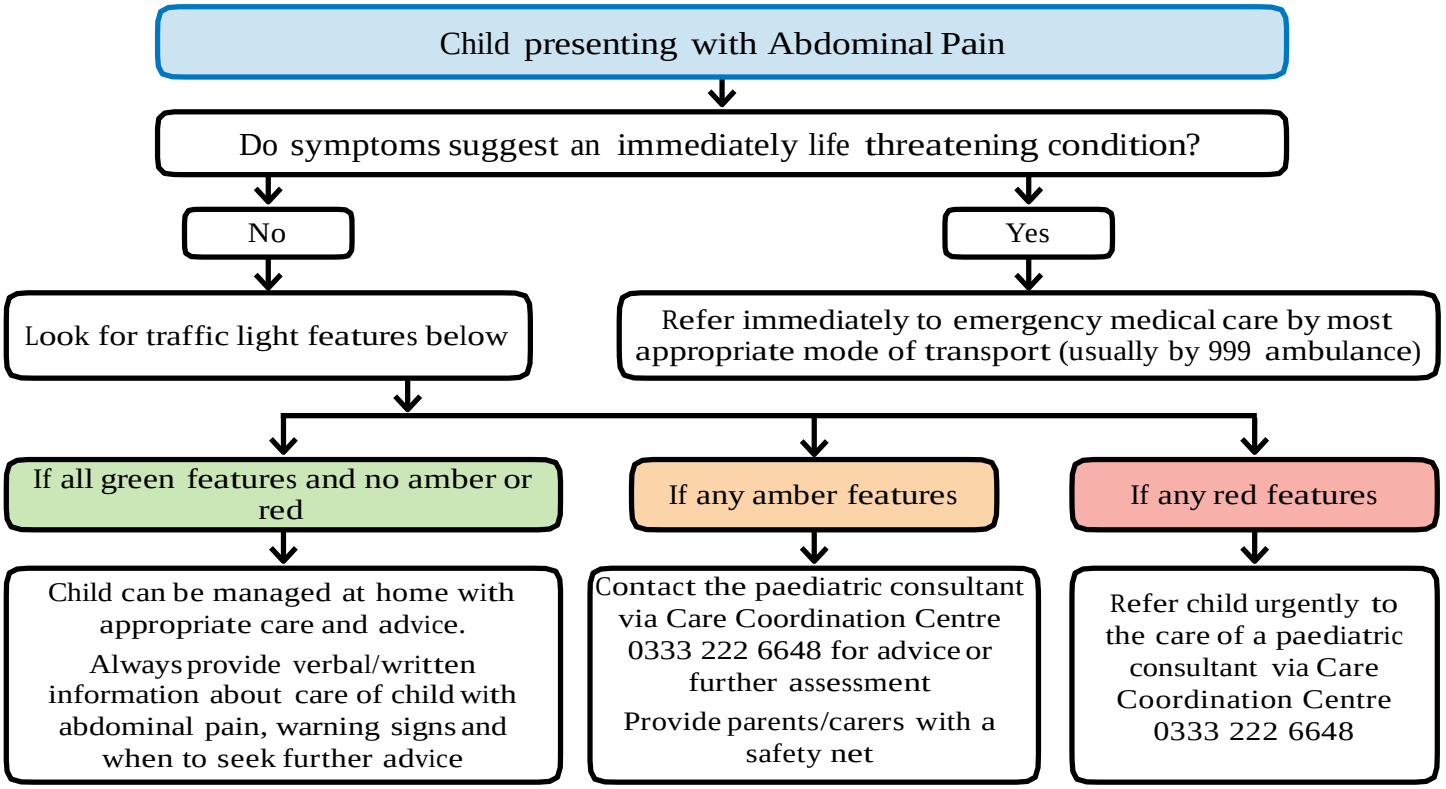
1. **Give your child one to two puffs of their reliever inhaler (usually blue), immediately – use a spacer if they need it.**
2. **Get your child to sit down and try to take slow, steady breaths. Keep them calm and reassure them**
3. **If they do not start to feel better, give them two puffs of their reliever inhaler (one puff at a time) every two minutes. They can take up to ten puffs**
4. **If they do not feel better after taking their inhaler as above, or if you are worried at any time, call 999.**
5. **If an ambulance does not arrive within 10 minutes and they are still feeling unwell, repeat step 3.**

If your child's symptoms improve and you do not need to call 999, you still need to take them to see a doctor or asthma nurse within 24 hours of an asthma attack.

Most people who have asthma attacks will have warning signs for a few days before the attack. These include having to use the blue reliever inhaler more often; changes in peak flow meter readings, and increased symptoms, such as waking up in the night. Don't ignore these warning signs, as they indicate that your child's asthma control is poor and they risk having a severe attack.

Clinical Assessment Tool

Abdominal Pain



	Green	Amber	Red
Activity	Active/responds normally to social cues		Drowsy/ no response to social cues
Respiratory	Respiratory Rate Normal (RR) Infant 40 Toddler 35 Pre-school 31 School age 27 Sats 95%		Respiratory rate > 60/minute Sats < 92%
Circulation and hydration	CRT < 2 seconds Heart rate normal Infant 120-170 Toddler 80-110 Pre-school 70-110 School age 70-110	CRT 2-3 seconds	CRT > 3 seconds
Other		Fever (see separate guide) Abdominal distension Sexually active/missed period Palpable abdominal mass Localised pain Jaundice	Abdominal guarding/rigidity Bile (green) stained vomit Blood stained vomit "Red currant jelly" stool Trauma associated Acute testicular pain Severe/increasing pain

NB. Broad guidance as differential diagnosis very wide depending on age.

This guidance is written in the following context

This assessment tool was arrived at after careful consideration of the evidence available including but not exclusively use BTS Guidelines and NHS evidence. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Signs and Symptoms of Specific Illnesses

Common causes of Abdominal Pain by Age

<2yr	2 to 12yr	12 to 16 years
Gastroenteritis	Gastroenteritis	Mesenteric adenitis
Constipation	Mesenteric adenitis	Acute appendicitis
Intussusception	Constipation	Menstruation
Infantile colic	UTI	Mittelschmerz
UTI	Onset of menstruation	Ovarian Cyst Torsion
Incarcerated Inguinal Hernia	Psychogenic	UTI
Trauma	Trauma	Pregnancy
Pneumonia	Pneumonia	Ectopic Pregnancy
Diabetes	Diabetes	Testicular Torsion
		Psychogenic trauma
		Pneumonia
		Diabetes

Diagnosis to be considered	Symptoms and signs in conjunction with abdominal pain
Gastroenteritis	Vomiting Diarrhoea (do not exclude other conditions eg intussusception, pelvic appendicitis, pelvic abscess and inflammatory bowel disease)
Intestinal obstruction eg Intussusception or volvulus	Bile stained vomiting Colicky abdominal pain Absence of normal stolling/flatus Abdominal distension Increased bowel sounds Visible distended loops of bowel Visible peristalsis Scars Swellings at the site of hernial orifices and of the external genitalia Stool containing blood mixed with mucus
Infective diarrhoea	Blood mixed with stools – ask about travel history and recent anti-biotic therapy
Inflammatory bowel disease	Blood in stools
Midgut volvulus (shocked child)	Blood in stools
Henoch schonlein purpura	Blood in stools
Haemolytic uremic syndrome	Blood in stools
Anorexia	Loss of appetite
Lower lobe pneumonia	Fever Cough Tachypnoea Desaturation
Poisoning	Ask about history of possible ingestions and what drugs and other toxic agents are available at home
Irreducible inguinal hernia	Examine inguinoscrotal region

Torsion of the testis	This is a surgical emergency and if suspected the appropriate surgeon should be consulted immediately
Jaundice	Hepatitis may present with pain due to liver swelling
Urinary Tract Infection	Routine urine analysis for children presenting with abdominal pain
Bites and stings	Ask about possibly bites and stings. Adder envenomation can result in abdominal pain and vomiting.
Peritonitis	refusal/inability to walk slow walk/stooped forward pain on coughing or jolting lying motionless decreased/absent abdominal wall movements with respiration abdominal distention abdominal tenderness – localised/generalised abdominal guarding/rigidity percussion tenderness palpable abdominal mass (see question below) bowel sounds – absent/decreased (peritonitis) associated non-specific signs – tachycardia, fever
Constipation	infrequent bowel activity Foul smelling wind and stools Excessive flatulence Irregular stool texture Passing occasional enormous stools or frequent small pellets Withholding or straining to stop passage of stools Soiling or overflow Abdominal distension Poor appetite Lack of energy Unhappy, angry or irritable mood and general malaise.
If patient is post-menarchal female	Suggest pregnancy test Consider ectopic pregnancy, pelvic inflammatory disease or other STD. Other gynaecological problems Mittelschmerz torsion of the ovary pelvic inflammatory disease imperforate hymen with hydrometrocolpos.
Known congenital or pre-existing condition	Previous abdominal surgery (adhesions) Nephrotic syndrome (primary peritonitis) Mediterranean background (familial mediterranean fever Hereditary spherocytosis (cholethiasis) Cystic fibrosis (meconium ileus equivalent) Cystinuria Porphyria.

When you feel a GP review in a specific time period is clinically appropriate but that falls outside of the 'in hours' GP service please advise your patient/family to call NHS 111 (at an agreed time interval / level of deterioration – depending on your concerns) and advise that there is a 'predetermined plan to speak with an Out of Hours GP'. Please provide your patient / family with a letter detailing your clinical findings and concerns to help the Out of Hours GP assessment.

Abdominal Pain Advice Sheet

Name of Child ..... Age ..... Date / Time advice given .....

Further advice / Follow up .....

.....

Name of Professional ..... Signature of Professional .....

How is your child?

Red

- Unresponsive
- Rash that does not disappear using the tumbler test
- Green or blood stained vomit
- Increasing sleepiness
- Severe or increasing pain

You need urgent help please phone 999 or go straight to the nearest Accident and Emergency Dept.

Amber

- Increased thirstiness
- Weeing more or less than normal
- Pain not controlled by regular painkillers
- Swollen tummy
- Yellow skin or eyes
- Blood in their poo or wee
- Not being as active or mobile as usual

You need to see or speak to a nurse or doctor today. Please ring your GP surgery or call NHS 111

Green

- If none of the above factors are present

Self Care. Using the advice overleaf you can provide the care your child needs at home

Some useful phone numbers and information

GP Surgery
(make a note of number here)

NHS 111
dial 111
available 24 hours – 7 days a week

Shropshire Walk-in Centre
Located next to A&E at
Royal Shrewsbury Hospital
Open from 8am to 8pm,
7 days a week including bank holidays

For online advice: NHS Choices www.nhs.uk (available 24 hours – 7 days a

If you need language support or translation please inform the member of staff to whom you are speaking.

For more copies of this document, please email: shrccg.communicationsteam@nhs.net

Or visit Shropshire CCG Website http://www.shropshireccg.nhs.uk/health-advice/self-care/

Abdominal Pain Advice Sheet

About abdominal pain in children

There are many health problems that can cause stomach pain for children, including:

- Bowel (gut) problems – constipation, colic or irritable bowel
- Infections – gastroenteritis, kidney or bladder infections, or infections in other parts of the body like the ear or chest
- Food-related problems – too much food, food poisoning or food allergies
- Problems outside the abdomen – muscle strain or migraine
- Surgical problems – appendicitis, bowel obstruction or intussusception (telescoping of part of the gut). Suspect appendicitis if pain low on the right side, walks bent over, won't hop or jump, and prefers to lie still.
- Period pain – some girls can have pain before their periods start
- Poisoning – such as spider bites, eating soap or smoking.
- The most common cause of recurrent stomach aches is stress. Over 10% of children have them. The pain occurs in the pit of the stomach or near the belly button. The pain is mild but real

How can I look after my child?

- Reassure the child and try to help them rest.
- If they are not being sick, try giving them paediatric paracetamol oral suspension. Avoid giving aspirin.
- Help your child drink plenty of clear fluids such as cooled boiled water or juice.
- Do not push your child to eat if they feel unwell.
- If your child is hungry, offer bland food such as crackers, rice, bananas or toast.
- Place a gently heated wheat bag on your child's tummy or run a warm bath for them.

Things to remember

- Many children with stomach pain get better in hours or days without special treatment and often no cause can be found.
- Sometimes the cause becomes more obvious with time and treatment can be started.
- If pain or other problems persist, see your doctor.

The Big 6

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