

### Predicted Surge in Bronchiolitis and Viral-induced wheeze.

Bronchiolitis (caused by RSV in 60-80%) is a common winter disease predominantly affecting children under one year of age. It is a common reason for presentations to general practice and ED, frequently resulting in hospital admission, contributing to paediatric units approaching or exceeding capacity each winter.

During the SARS-CoV-2 pandemic, the circulation of RSV was dramatically reduced in the United Kingdom and Ireland. Evidence from the Southern Hemisphere and other European countries suggests that as social distancing restrictions for SARS-CoV-2 are relaxed, RSV and other URT viral infection returns, causing delayed or even summer epidemics, with different age distributions.

Public health officials believe that, because many children have missed out on normal exposure to RSV due to lockdown measures including school closures, the virus may have much more spread and impact in the coming autumn/winter season. We are expecting this to affect babies and infants traditionally unwell with bronchiolitis but also older infants and preschool age children presenting with viral-induced wheeze.

The modelling suggests the spike could begin in the UK as soon as August and at Musgrove we are planning a phased response in anticipation of increased numbers as well as severity of illness. The majority of these babies and children will be assessed and managed in the community as they will not need hospital admission. There are a number of resources below and we will be circulating an escalation pathway for advice and referral if needed.

Access to a paediatric sats probe and a thermometer will be important in ensuring appropriate assessment and management.

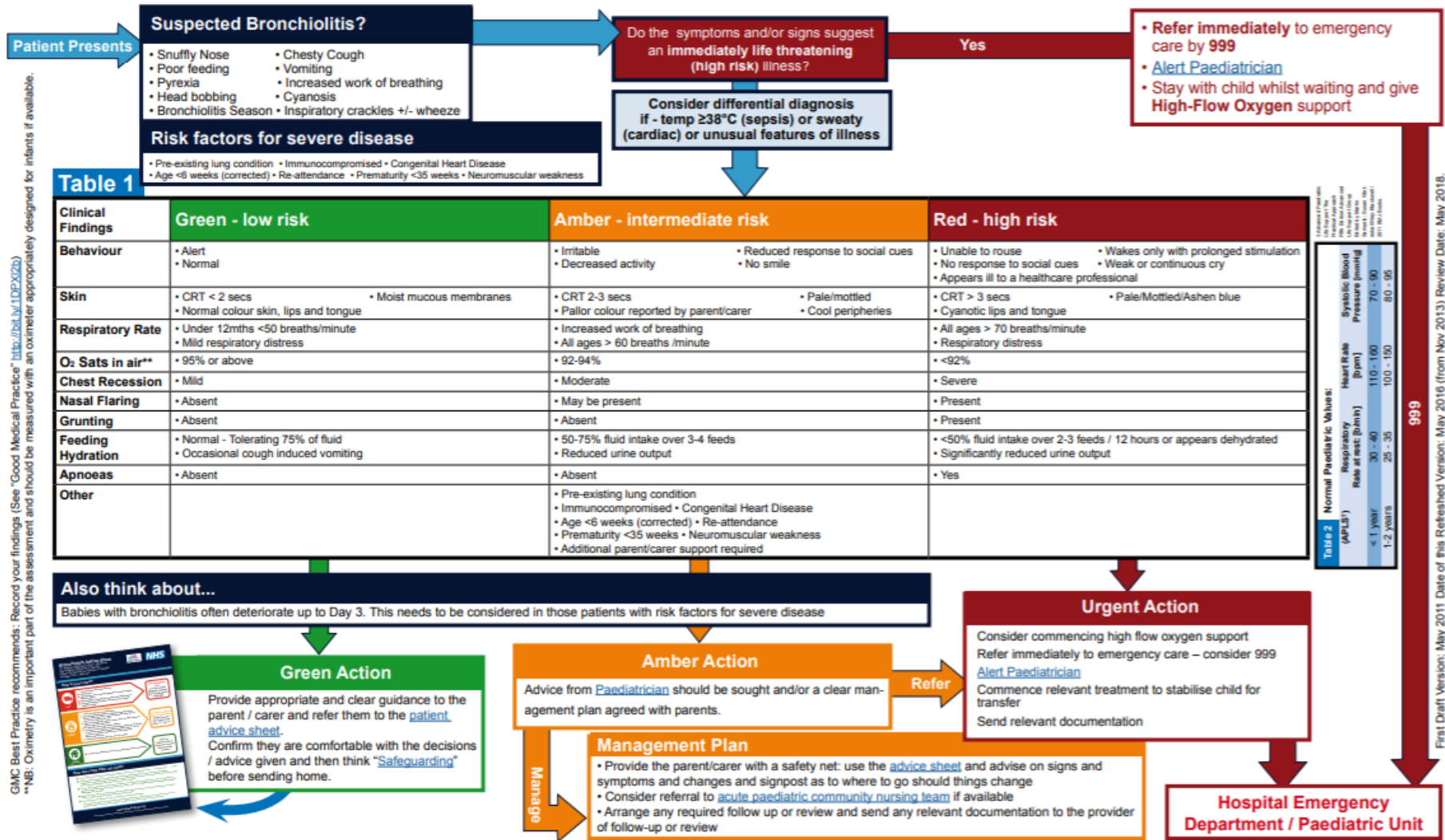
### Resources

Healthier Together Website: <https://what0-18.nhs.uk/professionals/gp-primary-care-staff/padiatric-pathways>

Royal College of Paediatrics and Child Health webinar: <https://www.rcpch.ac.uk/resources/managing-rsv-other-respiratory-viruses-2021-webinar-recording>

HANDI app.

# Pathway for the assessment and management of suspected bronchiolitis in primary care and the community in babies < 1 year of age



## **Referral pathways from Primary care to Paediatric team Musgrove Park Hospital**

### **If you need clinical advice but do not think the child needs acute paediatric assessment**

Please call consultant connect. This phone is carried between 10am to 4.30 pm by a paediatric consultant. We may be unable to answer immediately, please do try again.

### **Patients you think need acute paediatric assessment**

Please call switchboard 01823 333444 and ask for bleep number 2439.

This bleep is held by a senior paediatric clinician – paediatric consultant or senior registrar, seven days a week, 24 hours a day

The Clinician will discuss the referral over the phone with you to:

1. Offer assessment as required and advise you where to send these children – Paediatric Assessment Unit (PAU) or Acorn ward
2. Provide guidance to Primary care teams and agree a plan for safety-netting children who do not require a paediatric assessment acutely

Our paediatric team are requesting that children are accompanied by one adult only without siblings, and that families wear masks whenever possible.

**Please do not direct patients to self-present to the emergency department.**

## **Referral pathways from Primary care to Paediatric team Yeovil District Hospital**

### **If you need clinical advice but do not think the child needs acute paediatric assessment**

Please call **Consultant Connect**. This phone is carried between 10am to 4.30 pm by a Paediatric Consultant. We may be unable to answer immediately, please do try again.

### **Patients you think need acute paediatric assessment**

Please call switchboard **01935475122** and ask for bleep number **6715**.

This bleep is held by a senior Paediatric Clinician - seven days a week, 24 hours a day

The Clinician will discuss the referral over the phone with you to:

1. Offer assessment as required and advise you where to send these children – Paediatric Assessment Unit (PAU) in Emergency Department
2. Provide guidance to Primary care teams and agree a plan for safety-netting children who do not require a paediatric assessment acutely

Our paediatric team are requesting that children are accompanied by one adult only without siblings, and that families wear masks whenever possible.

**Please do not direct patients to self-present to the Emergency Department.**



## Bronchiolitis Advice Sheet

(a cause of persistent cough, mild fever and feeding difficulties in infants)  
Advice for parents and carers of children younger than 1 year old



### How is your child?



RED

If your child has any of the following:

- Has blue lips
- Has pauses in their breathing (apnoeas) or has an irregular breathing pattern or starts grunting
- Severe difficulty in breathing - too breathless to feed
- Becomes pale, mottled and feels abnormally cold to touch
- Becomes extremely agitated, confused or very lethargic (difficult to wake)
- Is under 3 months of age with a temperature of 38°C / 100.4°F or above (unless fever in the 48 hours following vaccinations and no other red or amber features)

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



AMBER

If your child has any of the following:

- Has laboured/rapid breathing or they are working hard to breath - drawing in of the muscles below their lower ribs, at their neck or between their ribs (recession).
- Seems dehydrated (sunken eyes, drowsy or no urine passed for 12 hours)
- Is becoming drowsy (excessively sleepy)
- Seems to be getting worse or if you are worried

**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 features in the red or amber boxes above are present.

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

### How can I look after my child?

- If your child is not feeding as normal offer smaller feeds but more frequently. Offer.....ounces every.....hours
  - Children with bronchiolitis may have some signs of distress and discomfort. You may wish to give either Paracetamol or liquid Ibuprofen to give some relief of symptoms (Paracetamol can be given from 2 months of age). Please read and follow the instructions on the medicine container.
  - If your child is already taking medicines or inhalers, you should carry on using these. If you find it difficult to get your child to take them, ask your Pharmacist, Health Visitor or GP. **Bronchiolitis is caused by a virus so antibiotics will not help.**
  - Make sure your child is not exposed to tobacco smoke. Passive smoking can seriously damage your child's health. It makes breathing problems like bronchiolitis worse.
  - Remember smoke remains on your clothes even if you smoke outside.
- If you would like help to give up smoking you can get information / advice from your local GP surgery or by calling the National Stop Smoking Helpline Tel: 0800 169 0 169 from 7am to 11pm every day.

## Bronchiolitis Advice Sheet

(a cause of persistent cough, mild fever and feeding difficulties in infants)  
Advice for parents and carers of children younger than 1 year old



### What is Bronchiolitis?

Bronchiolitis is an infection that causes the tiniest airways in your child's lungs to become swollen. This can make it more difficult for your child to breathe:

- Bronchiolitis is caused by virus infections.
- It is common in winter months and usually only causes mild cold like symptoms.
- Most children get better on their own.
- Some children, especially very young ones, can have difficulty with breathing or feeding and may need to go to hospital.

### What are the symptoms?

- Your child may have a runny nose and sometimes a temperature and a cough.
- After a few days your child's cough may become worse.
- Your 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 traffic light advice overleaf.
- As breathing becomes more difficult, your baby may not be able to take their usual amount of milk by breast or bottle.
- You may notice fewer wet nappies than usual.
- Your child may vomit after feeding and become miserable.

### How long does Bronchiolitis last?

- Most children with bronchiolitis will seem to worsen during the first 1-3 days of the illness before beginning to improve over the next two weeks. The cough may go on for a few more weeks. Antibiotics are not required.
- Your 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 child is recovering well. But if you are worried about your child's progress discuss this with your Health Visitor, Practice Nurse or GP or contact NHS 111.

**A clinical support tool to aid with remote assessment of cough and breathlessness in children <1 year age.**



Clinical findings	Green – low risk	Amber – intermediate risk	Red – high risk
Colour Activity	<ul style="list-style-type: none"> <li>• Normal colour of skin, lips and tongue</li> <li>• Responds normally to social cues</li> <li>• Content/smiles</li> <li>• Stays awake or wakens quickly</li> <li>• Strong normal cry / not crying</li> </ul>	<ul style="list-style-type: none"> <li>• Pallor</li> <li>• Reduced response to social cues</li> <li>• Wakes only after prolonged stimulation</li> </ul>	<ul style="list-style-type: none"> <li>• Blue or grey colour</li> <li>• Unable to rouse or if roused does not stay awake</li> <li>• Clinical concerns about nature of cry (Weak, high pitched or continuous)</li> </ul>
Respiratory	<ul style="list-style-type: none"> <li>• None of amber or red symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• RR 50-70 breaths/min</li> <li>• Mild / moderate respiratory distress</li> <li>• Audible stridor only when distressed</li> </ul>	<ul style="list-style-type: none"> <li>• Grunting</li> <li>• RR &gt; 70 breaths/min</li> <li>• Severe respiratory distress</li> <li>• Pauses in breathing (apnoeas)</li> <li>• Audible stridor at rest</li> </ul>
Circulation / hydration	<ul style="list-style-type: none"> <li>• None of amber or red symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• Cold hands and feet in absence of fever</li> <li>• Reduced urine output</li> <li>• Reduced fluid intake: 50-75% of usual intake over previous 3-4 feeds</li> </ul>	<ul style="list-style-type: none"> <li>• Markedly reduced fluid intake: &lt;50% of usual intake over last 2-3 feeds</li> </ul>
Other	<ul style="list-style-type: none"> <li>• None of amber or red symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• Risk factors for severe illness: pre-existing lung condition, congenital heart disease, age &lt;6 weeks (Corrected), prematurity &lt;35 weeks, known immunodeficiency</li> <li>• Age 3-6 months with temp <math>\geq 39^{\circ}</math> (102.2°F)</li> <li>• Fever for <math>\geq 5</math> days</li> <li>• Additional parental/carer support required</li> <li>• Lower threshold for face to face review if significant chronic co-morbidities</li> </ul>	<ul style="list-style-type: none"> <li>• Age 0-3 months with temp <math>\geq 38^{\circ}</math> (100.4°F)</li> <li>• Seizure</li> </ul>

<p><b>Green Action</b></p> <p><a href="#">Provide cough/ breathlessness in children under 1 year safety netting advice</a></p> <p>Confirm they are comfortable with the decisions/ advice given</p> <p>Always consider safeguarding issues</p>	<p><b>Amber Action</b></p> <p>Consider video consultation and/or refer to primary care service for review</p>	<p><b>Red Action</b></p> <p>Refer immediately to emergency care – consider whether 999 transfer or parent/taxi most appropriate based on clinical acuity etc.</p>
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A clinical support tool to aid with the remote assessment of children with cough and breathlessness who are over 1 year of age.



Clinical findings	Green – low risk	Amber – intermediate risk	Red – high risk
Colour Activity	<ul style="list-style-type: none"> <li>• Normal colour of skin, lips and tongue</li> <li>• Content/smiles</li> <li>• Stays awake/awakens quickly</li> </ul>	<ul style="list-style-type: none"> <li>• Pale</li> <li>• No smile</li> <li>• Decreased activity/lethargic</li> </ul>	<ul style="list-style-type: none"> <li>• Blue or grey colour</li> <li>• No response</li> <li>• Unable to rouse or if roused does not stay awake</li> <li>• Confused</li> <li>• Clinical concerns about nature of cry (Weak, high pitched or continuous)</li> </ul>
Respiratory	<ul style="list-style-type: none"> <li>• None of amber or red symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• RR &gt;40 breaths/min if age 12 months - 23 months</li> <li>• RR &gt;35 breaths/min if age 2-5 years</li> <li>• RR &gt;30 breaths/min if age 5 -12 years</li> <li>• RR &gt;25 breaths/min if age &gt;12 years</li> <li>• Mild / Moderate resp distress</li> <li>• Audible stridor on exertion/distress only</li> </ul>	<ul style="list-style-type: none"> <li>• Grunting</li> <li>• Audible stridor at rest</li> <li>• Severe tachypnoea: RR &gt; 10 breaths per minute above amber levels</li> <li>• Severe respiratory distress</li> <li>• Unable to complete sentences</li> </ul>
Circulation / hydration	<ul style="list-style-type: none"> <li>• None of amber or red symptoms</li> <li>• Able to tolerate some fluids</li> <li>• Passing urine</li> </ul>	<ul style="list-style-type: none"> <li>• Cold hands and feet in absence of fever</li> <li>• Reduced urine output</li> <li>• Not tolerating fluids / repeated vomiting</li> <li>• Unable to swallow saliva</li> </ul>	
Other	<ul style="list-style-type: none"> <li>• None of amber or red symptoms</li> </ul>	<ul style="list-style-type: none"> <li>• Fever for ≥ 5 days</li> <li>• Risk factors for severe disease – known asthma, chronic lung disease, bronchiectasis/CF, immunodeficiency etc.</li> <li>• Additional parental/carer support required</li> </ul>	<ul style="list-style-type: none"> <li>• Sudden onset and parental concern about inhaled foreign body</li> </ul>

### Green Action

[Provide cough/shortness of breath >1 year safety netting advice](#)  
 Confirm they are comfortable with the decisions/ advice given.  
 Always consider safeguarding issues

### Amber Action

Consider video consultation  
 and/or  
 refer to primary care service for review

### Red Action

Refer immediately to emergency care – consider whether 999 transfer or parent/taxi most appropriate based on clinical acuity etc.