Whittington Health NHS

Bronchiolitis

Subject:	Bronchiolitis
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Policy Executive Owner:	Divisional Director WCF
Designation of Author:	Dr John Moreiras, Consultant Paediatrician Dr H Mitchell, Foundation Year Doctor
Name of Assurance Committee:	As above
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Target Audience:	Doctors and nurses looking after children (Community and Hospital Paediatric teams as well Emergency department)
Key Words:	Bronchiolitis, Infant, Viral Infection

Version Control Sheet

Version	Date	Author/ Reviewer	Status	Comment
Version 1	Nov 09	Dr N Patel, Dr J Raine, Dr J Beckmann	New	
Version 2	Nov 14	Dr J Moreiras	Review	Assessment and Flow diagram in accordance with NICE. (2) use of high flow nasal oxygen in patients needing more than 0.5L NC oxygen.

➢ Criteria for use

For all cases or suspected cases of bronchiolitis at the Whittington Hospital. This guideline is to be used by paediatric and emergency department staff treating children with this condition.

➢ Background

Bronchiolitis is an acute infectious disease of the lower respiratory tract that occurs primarily in young infants (< 2 years). It is a seasonal viral illness characterised by fever, nasal discharge and dry, wheezy cough.

Annual epidemics typically occur mid-November to late March. Roughly one third of infants will develop bronchiolitis in the first year of life. Peak incidence is 3-6 months and 90% of infants requiring hospitalisation are less than 1 year of age.

Infection only confers partial immunity so re-infection is common throughout life. After the age of 3, infection is usually milder and confined to the upper respiratory tract.

RSV virus is responsible for 75% of cases of bronchiolitis, rhinovirus is the second most common virus. Other viruses responsible include influenza, para-influenza, adenovirus and metapneumovirus

➢ Risk factors for severe disease

- Infants less than 12 weeks of age
- Infants with cardiac disease
- Preterm infants (<37 weeks gestation). Infants born at less than 32 weeks gestation are at particularly increased risk of hospitalisation and severe disease
- Infants with lung disease e.g. chronic lung disease, premature, cystic fibrosis
- Infants with neurological, neuromuscular disease or who are Immunocompromised

➢ Clinical features

Classically it starts with coryzal symptoms and associated fever. After 2-3 days, the infection spreads to the lower respiratory tract causing increasing cough and shortness of breath. Apnoea is a frequent complication especially in the younger infant, and may be the presenting feature in some infants. There may be associated feeding difficulties +/- vomiting. Examination shows increased respiratory effort, inspiratory crackles and wheeze on auscultation. +/- signs of dehydration. Most infants /children improve within 3-4 days.

Common features:

- Rhinorrhoea (Runny nose)
- Cough
- Poor Feeding
- Vomiting
- Pyrexia
- Respiratory distress (increased respiratory rate, subcostal/intercostal recession, tracheal tug)
- Apnoea
- Inspiratory crackles +/- wheeze
- Cyanosis

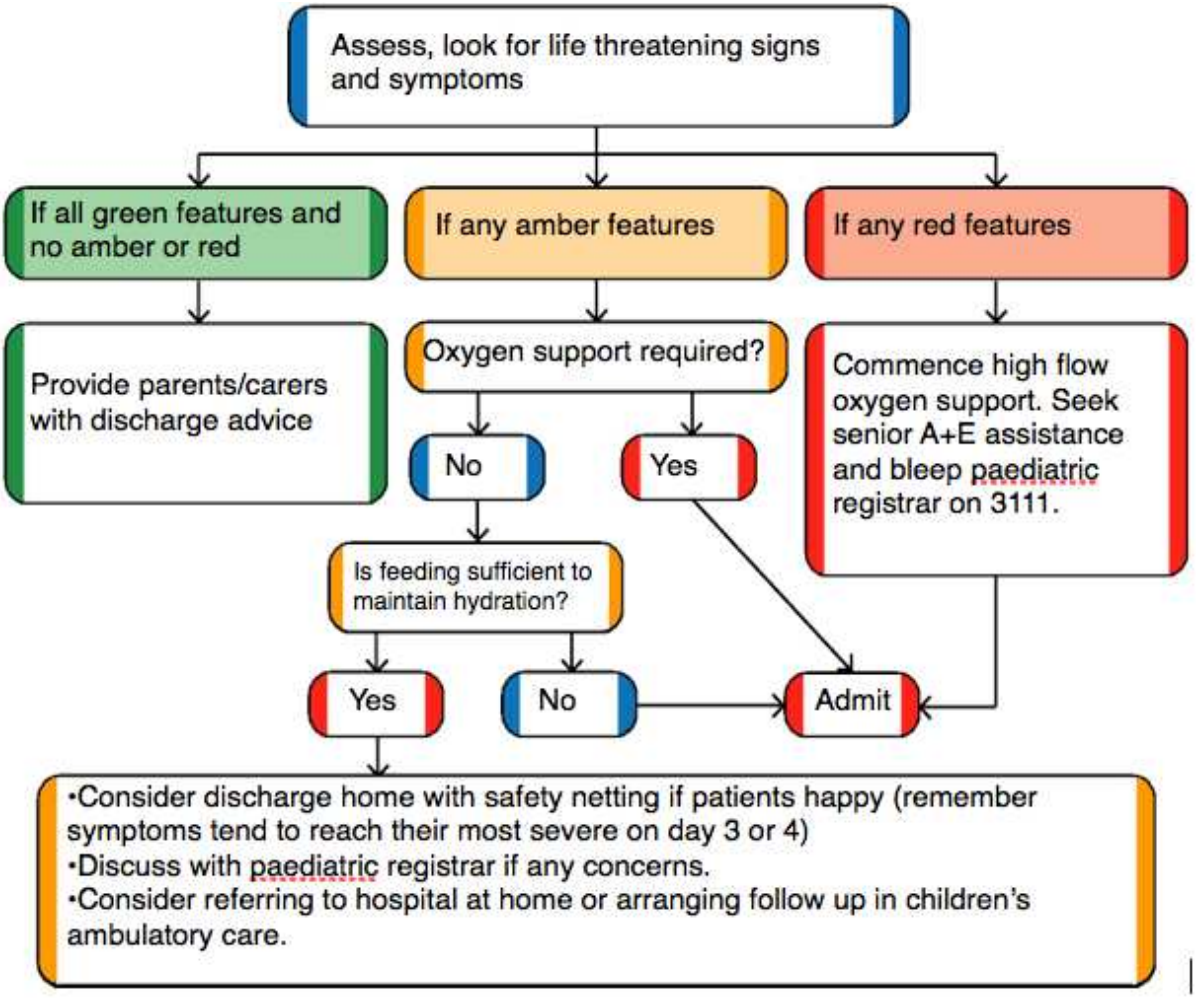
Differential diagnosis:

- Viral induced wheeze (>12 months old)
- Bacterial pneumonia
- Chronic pulmonary disease
- Foreign body aspiration
- Congenital heart disease/heart failure
- Vascular ring
- Sepsis
- Severe metabolic acidosis

➢ Assessment

It is important to assess whether the infant has mild, moderate or severe illness. The table below gives symptoms so children can be categorised into a red, amber or green group. This directs ongoing management.

	Green	Amber	Red
Resp rate **<12 months** **>12 months**	 less than 50 breaths/min less than 40 breaths/min	 50-60 breaths/min 40-60 breaths/min	 >60 breaths/min >60 breaths/min
Sats in air	96% or above	93-95%	<93%
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 (half of usual wet nappies)
Apnoeas	Absent	Absent	Present
Skin	•CR <2 •Normal colour skin. •Moist mucous membranes.	•CR 2-3 seconds. •Pale/mottled •Pallour reported by parent/carer. •Cool peripheries.	•CR >3 •Pale/mottled/ashen/blue •Cyanotic lips and tongue.
Behaviour	•Alert. •Normal behaviour	•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 health care professional



Green:
These patients can be managed in ED and discharged home. However advise parents that the symptoms tend to reach their most severe on the 3rd or 4th day of illness.

There is no benefit to giving any hypertonic saline neb in ED and then discharging the patient home. There is a risk of bronchospasm following hypertonic saline administration and patients should be closely observed following this.

Amber:
Clinical decision needs to be made whether these infants need to be managed in hospital, by hospital at home or discharged. Hospital at home is only an option for children who have an Islington GP.

Red:
Any infant with any red symptoms must be discussed with the paediatric registrar and will need admission. There should be a low threshold for admission.

➢ Management

Moderate Disease (Amber)

Discuss with paediatrics:
- Most will need to be seen by a member of the paediatric team.
- They May need admission to the Children's Assessment unit (CAU)/ Ifor ward for a period of assessment of oxygen saturations, respiratory effort and feeding.
- Supportive measures are the mainstay of treatment.

Investigations:
- Not normally needed
- NPA if admitted

Oxygen/ High Flow Nasal Oxygen (HFNO)
- If they have mild to moderate recession, or an oxygen requirement then give supplementary humidified oxygen via nasal cannula. To Maintain Sats >92%
- If they are requiring more than 0.5 L/min oxygen, they should be considered for High Flow Nasal Oxygen (HFNO). See HFNO guideline.

Feeds/Fluids:
- Offer smaller volumes of feed 2- 3 hourly
- Oral: If no increased oxygen requirements with feeds and respiratory rate is less than 50/min
- Oro/nasogastric: if respiratory rate is between 50-60/min but no increase in respiratory distress during feeds
- Intravenous: If respiratory rate > 60/min or if there is an increase in respiratory distress with gastric feeds. Administer 2/3 maintenance.

Hypertonic (3%) saline:
- Consider trial of 2 doses of nebulised hypertonic (3%) saline of 4ml per dose, in oxygen. If symptoms improve, nebulisation may be repeated, and continued if there is clear clinical benefit. Please document in the patient notes any reason for not continuing (eg. bronchospasm).
- There is a risk of bronchospasm following hypertonic saline administration and patients should be closely observed following this. As such some centres will routinely use it together with Salbutamol.
- If used alone:
    - Every 2 hours for 3 doses
    - Then every 4 hours for 5 doses
    - Then every 6 hours until discharge
- If used with bronchodilators or adrenaline:
    - 6-8 hourly until discharge
- Note: A systematic review on the use of nebulised hypertonic (3%) saline has shown some benefit in the out-patient and in-patient setting for moderate disease (clinical severity score improvements, reduced length of time on supplementary oxygen and reduced length of hospital stay).

- If the infant improves following Hypertonic saline, this does not mean that they are well enough to be discharged. The family will not have the ability to repeat this at home. Instead they should be admitted to CAU or Ifor ward and reviewed 4-6 hours post neb. If they are well at this point then they can be considered for discharge.

Bronchodilators:
- Consider nebulised ipratropium 125mcg or nebulised salbutamol 2.5mg
- Reassess 10-20 minutes after administration and only continue if clear benefit.
- Note: systematic reviews have shown that there is only modest benefit from bronchodilators in short term clinical scores.

Severe Disease (Red)

Refer immediately to paediatrics. Will all need admission.

Investigations
- NPA.
- FBC/U&E (only if siting an i.v cannula)
- ABG: only if tiring or Fi02>40% or requiring ventilatory support.
- CXR; only if deteriorating, requiring ventilatory support, or if suspect superadded bacterial infection

Oxygen/ Optiflow
- If they have mild to moderate recession, or an oxygen requirement then give supplementary Humidified oxygen via nasal cannula. To Maintain Sats >92%
- If they are requiring more than 500cc of oxygen, they should be considered for High Flow Nasal Oxygen (HFNO) ie Optiflow. See Optiflow guideline.

Fluids
- Intravenous: If respiratory rate > 60 breaths per minute or if there is an increase in respiratory distress with gastric feeds . Give 2/3 maintenance fluids.

Hypertonic (3%) saline:
- Consider trial of 2 doses of nebulised hypertonic (3%) saline of 4ml per dose, in oxygen. If symptoms improve, nebulisation may be repeated, and continued if there is clear clinical benefit. Please document in the patient notes any reason for not continuing (eg. bronchospasm).
- There is a risk of bronchospasm following hypertonic saline administration and patients should be closely observed following this. As such some centres will routinely use it together with Salbutamol.
- If used alone:
    - Every 2 hours for 3 doses
    - Then every 4 hours for 5 doses
    - Then every 6 hours until discharge
- If used with bronchodilators or adrenaline:
    - 6-8 hourly until discharge
- Note: A systematic review on the use of nebulised hypertonic (3%) saline has shown some benefit in the out-patient and in-patient setting for moderate disease

(clinical severity score improvements, reduced length of time on supplementary oxygen and reduced length of hospital stay).

Adrenaline:

- Consider trial of 2 doses of nebulised adrenaline 0.5ml/kg of 1;1000 (maximum dose 3 ml) in oxygen . If symptoms improve, nebulisation may be repeated after 30 minutes.
- Note: A systematic review on the use of nebulised adrenaline has shown some benefits in the out-patient setting (clinical score improvements and improved oxygenation). However, as firm evidence for the use of adrenaline in bronchiolitis is currently lacking, this protocol does not support its routine use but a trial may be appropriate to assess the individual infants response.

Bronchodilators:

- Consider nebulised ipratropium 125mcg or nebulised salbutamol 2.5mg
- Reassess 10-20 minutes after administration and only continue if clear benefit.
- Note: systematic reviews have shown that there is only modest benefit from bronchodilators in short term clinical scores.

➢ Assisted Ventilation

High Flow Nasal Oxygen (HFNO) (see HFNO guideline)

- For Mild to moderate Respiratory distress consider HFNO
- If they are requiring more than 0.5L/min of oxygen, they should be considered for High Flow Nasal Oxygen (HFNO).

The Cochrane review from 2014 http://www.ncbi.nlm.nih.gov/pubmed/24442856 would suggest There is insufficient evidence to determine the effectiveness of HFNC therapy for treating infants with bronchiolitis. There was no clear evidence of a difference in total duration of oxygen therapy, time to discharge or total length of stay between groups (optiflow and headbox).

The current literature shows mixed results. The followingTwo papers would indicate there is a benefit:

- Evidence showing optiflow improves respiratory distress score, O2 sats and patient comfort score - Spentzas T, Minarik M, Patters AB, Vinson B, Stidham G. Children with respiratory distress treated with high-flow nasal cannula. J Intensive Care Med 2009;24:323-8.
- Evidence showing it reduces intubation rates - McKiernan C, Chua LC et al. High flow nasal cannula therapy in infants with bronchiolitis. J of Pediatrics April 2010;156 (4):634-638.

HFNO, is not a substitute for CPAP. Everyone is agreed on that HFNO is very well tolerated, more so than other forms of oxygen support.

CPAP

Indications for CPAP:

- Requiring Fi02>40% to obtain sats of ≥92%.
- Failure to improve on HFNO
- Severe intercostal recession
- PaCO2>6.5Kpa
- PH<7.30
- Apnoea - may be of benefit but be VERY CAUTIOUS as CPAP does not provide a back up respiratory rate

Feeding on CPAP

- Start Intravenous fluids initially, 2/3 maintenance.
- Consider continuous nasogastric feeds if condition stable/improving after 12 hours
- Insert nasogastric tube prior to CPAP to avoid gastric distension and aspiration of gastric contents

Intubation and ventilation

Consider early Anaesthetic review.

Some infants will continue to deteriorate on CPAP or will clearly need intubation at initial assessment. Indications for intubation:

- Drowsiness/exhaustion
- Recurrent apnoea despite CPAP
- Worsening hypoxaemia
- Worsening hypercarbia
- Reduced conscious level

intubation

See Children's Acute Transport Guideline (CATs) for more information http://site.cats.nhs.uk/in-a-hurry/cats-clinical-guidelines/

- Pre-oxygenate
- Fluid boluses and resuscitation drugs available
- Consider modified rapid sequence induction with ketamine 1-2 mg/kg
- (bronchodilator activity): see induction of anaesthesia guideline
- CXR post intubation

Management following intubation

- Sedate and paralyse for ventilation
- Pursue a pressure limited permissive hypercapnia strategy (pH > 7.2)
- Limit PIP < 35 cm H2O
- Keep tidal volume 5-8 ml/kg
- Rate <30 bpm; high rates may lead to air-trapping
- I: E ratio of 1:2
- PEEP of 5-7 is often necessary to counteract intrinsic PEEP

- Failure to apply extrinsic PEEP at 85-100% of intrinsic PEEP will result in progressive over inflation and haemodynamic compromise.
- Regular chest physiotherapy and suctioning for mucus plugging.
- Check CXR for ETT position and to exclude pneumothorax.

Indications for HDU/ITU care

- Failure to maintain O2 sats >92% with increasing oxygen therapy.
- Deteriorating respiratory status with signs of increasing respiratory distress and/or exhaustion.
- Recurrent apnoeas

➢ Corticosteroids

- No role for inhaled or systemic corticosteroids in bronchiolitis.

➢ Antibiotics

- Do not use routinely in bronchiolitis as risk of associated serious bacterial infection is low
- Consider however in infants with severe disease and in those requiring assisted ventilation

➢ Physiotherapy

- Should not be part of routine management
- No evidence of benefit.

➢ Investigations

- Bronchiolitis is a clinical diagnosis and as such there are no specific investigations that need to be done.

- Temperature children with bronchiolitis can be afebrile or have a low grade fever. Children with temperature >39 C need careful evaluation to exclude another cause of respiratory symptoms.

- Nasopharyngeal aspirate for RSV should be done for all children who are going to be admitted. (Not for diagnostic purposes but in case cohort nursing is needed on the ward).

- Chest x-rays DO NOT need to be done in a child who appears to have 'straightforward' bronchiolitis.
    - Chest x-ray findings are non-specific and frequently lead to the use of antibiotics with no demonstrable benefit. This is often because atelectasis (commonly seen in bronchiolitic chest x-rays) frequently prompts doctors to administer antibiotics)

- Sever Bronchiolitis: in those who are who are not responding to treatment or where you are considering intubation, the following investigations should be considered:
    - FBC, U+E (high risk of SIADH), Blood gas, Blood Cultures, CXR

➢ Discharge criteria

- Maintaining 75% of normal intake orally

- Sats above 94% in air and stable when patient sleeping

➢ Follow-up

- No routine follow up is required.

- Parents should be safety-netted to return if their child is taking less than half of usual feeds or develops signs of increased work of breathing.

- Advice to parents on discharge
    - Resolution of symptoms - warn parents it can take up to 21 days for a complete resolution of symptoms. A minority of infants will still have symptoms at 4 weeks.
    - Smoking - there is strong evidence to suggest that smoking increases the risk of admission with bronchiolitis. If parents willing to accept referral to stop smoking please contact specialist nurse at Whittington to organise referral.
    - Re-infection - inform parents that this may occur
    - Persistent wheeze - inform parents that there is an increased risk of wheezing post bronchiolitis, more so if family or personal history of atopy.

- Give parents a patient information leaflet (appendix A) (print last two pages of document).

➢ Prevention

- For indications and more details on Palivizumab, please see the Green Book" Department of Health.

- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/148494/Green-Book-Chapter-27a-dh_130131.pdf

➢ Contacts (inside and outside the Trust including out-of-hours contacts)

- Paediatric registrar on call – bleep 3111

- Paediatric consultant on call (via switchboard)

- Children's Acute Transport Service (CATS): Emergency referral/advice hotline 0800 0850 003

➢ References (evidence upon which the guideline is based)

1. SIGN. Bronchiolitis in children - Guideline No. 91. 2006.
2. Meates.M: Best Practice Bronchiolitis. Archives of Diseases in Childhood Nov 2005 Education and Practice Edition
3. Advanced Paediatric Life Support Jan 2005
4. Clinical Assessment Tool for Babies/Children under 2 years with Suspected Bronchiolitis. West Sussex Hospital Guideline. (http://www.wsh.nhs.uk/ChildrensServices/docs/pathways/BronchiolitisBronchiolitispathwayforinhospitalcare.pdf)
5. Zhang L, Mendoza-Sassi RA, Wainwright C, Klassen TP. Nebulised hypertonic saline solution for acute bronchiolitis in infants. Cochrane Database of Systematic Reviews 2013, Issue 7. Art. No.: CD006458. DOI: 10.1002/14651858.CD006458.pub3.
6. Paediatric Society of New zealand. Wheeze and chest infection in infants under 1 year. Wellington: The Society; 2005. [cited 22 August 2006]. Available from url: http://www.paediatrics.org.nz/documents/
7. Nagakumar P, Doull I. Current therapy for bronchiolitis. Arch Dis Child. 2012 Sep;97(9):827-3

8. Thompson M, Vodicka TA, Blair PS, Buckley DI, Heneghan C, Hay AD et al. Duration of symptoms of respiratory tract infections in children: systematic review BMJ 2013; 347:f7027.
9. Meates.M: Best Practice Bronchiolitis. Archives of Diseases in Childhood Nov 2005 Education and Practice Edition
10. CATS bronchiolitis protocol 2015
11. Kellner et al: Bronchodilators for bronchiolitis (Cochrane Review) Cochrane Library, Issue 1, 2004.
12. Perrotta et al; Chest physiotherapy for acute bronchiolitis in paediatric patients aged between 0-24 months. (Cochrane Review) Issue 2 Feb 2005
13. Hartling L et al: Epinephrine for bronchiolitis (Cochrane Review) Cochrane Library, Issue 2, 2005.
14. Swingler et al: A randomised controlled trisl of clinical outcome after chest radiograph ambulatory acute LRTI in children. Lancet 1998; 351:404-408
15. King et al: Pharmacological treatment of bronchiolitis in infants and children: a systematic review. Archive of paediatric and adolescent medicine 2004; 158:127-137

➢ APPENDIX A – Patient information leaflet

http://www.sign.ac.uk/pdf/sign91parent.pdf

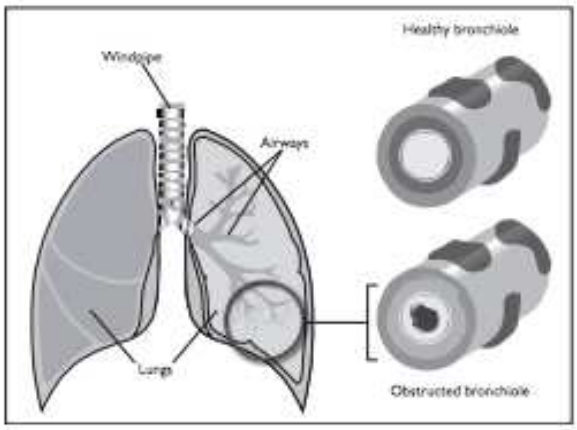
Information about **bronchiolitis** for parents and carers

What is bronchiolitis?

Bronchiolitis is when the tiniest air passages in your baby's lungs become swollen. This can make it more difficult for your baby to breathe. Usually, bronchiolitis is caused by a virus called respiratory syncytial virus (known as RSV).

Almost all children will have had an infection caused by RSV by the time they are two. It is most common in the winter months and usually only causes mild 'cold-like' symptoms. Most children get better on their own.

Some babies, especially very young ones, can have difficulty with breathing or feeding and may need to go to hospital.



Can I prevent bronchiolitis?

No. The virus that causes bronchiolitis in babies also causes coughs and colds in older children and adults so it is very difficult to prevent.

What are the symptoms?

- Bronchiolitis starts like a simple cold. Your baby may have a runny nose and sometimes a temperature and a cough.
- After a few days your baby's cough may become worse.
- Your baby'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 very young babies, bronchiolitis may cause them to have brief pauses in their breathing.
- 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 may be sick after feeding and become irritable.
- How can I help my baby?
- If feeding is difficult, try breastfeeding more often or offering smaller bottle feeds more often.
- If your baby has a temperature, you can give him or her paracetamol (for example, Calpol or Disprol). You must follow the instructions that come with the paracetamol carefully. If you are not sure, ask your community pharmacist if paracetamol is suitable for your baby, and what dose you should give.
- If your baby is already taking any medicines or inhalers, you should carry on using these. If you find it difficult to get your baby to take them, ask your doctor for advice.
- Bronchiolitis is caused by a virus so antibiotics won't help.

Make sure your baby is not exposed to tobacco smoke. Passive smoking can seriously damage your baby's health. It makes breathing problems like bronchiolitis worse.

How long does bronchiolitis last?

- Most babies with bronchiolitis get better within about two weeks. They may still have a cough for a few more weeks.
- Your baby can go back to nursery or daycare as soon as he or she is well enough (that is feeding normally and with no difficulty breathing).
- There is usually no need to see your doctor if your baby is recovering well. If you are worried about your baby's progress, discuss this with your doctor or health visitor.

When should I get advice?

Contact your GP if :

- you are worried about your baby;
- your baby is having difficulty breathing;
- your baby is taking less than half his or her usual feeds over two to three feeds, or has no wet nappy for 12 hours;
- your baby has a high temperature; or
- your baby seems very tired or irritable.

Dial 999 for an ambulance if:

Your baby is having a lot of difficulty breathing and is pale or sweaty;

Your baby's tongue and lips are turning blue; or

There are long pauses in your baby's breathing.

What will happen if I have to take my baby to hospital?

- At hospital, a doctor or nurse will examine your baby.
- The doctor or nurse will check your baby's breathing using a special machine called a pulse oximeter. This is a light-probe which will usually be wrapped around your baby's finger or toe. It measures the oxygen in your baby's blood, and helps doctors and nurses to assess your baby's breathing.
- If your baby needs oxygen, it will be given through fine tubes into the nose or through a mask.
- If your baby needs help to breathe or feed, he or she may need to stay in hospital.
- You will be able to stay with your baby while he or she is in hospital.
- Your baby will probably only need to stay in hospital for a few days. You will be able to take your baby home when he or she is able to feed and doesn't need oxygen any more.
- To confirm the cause of the bronchiolitis, some of the mucous from your baby's nose may be tested for RSV. In hospital, it is important to separate babies with and without the virus to stop the virus spreading.
- You will need to clean your hands with alcohol gel or wash and dry them carefully before and after caring for your baby.
- Visitors may be restricted to prevent the spread of infection.
- If your baby needs help with feeding, he or she may be given milk through a feeding tube. This is a small plastic tube which is passed through your baby's nose or mouth and down into his or her stomach. It is kept in place by taping the tube to your baby's cheek. The tube will be removed when your baby is able to feed again.
- Some babies may need to be given fluids through a drip to make sure they are getting enough fluids.
- A few babies become seriously ill and need to go into intensive care (perhaps in a different hospital) for specialist help with their breathing.

After leaving hospital

Remember, you can ask your GP or health visitor for advice or contact them if you become worried about your baby.

Will it happen again?

Your baby is not likely to get bronchiolitis again, although occasionally it can happen.

Are there any long-term effects?

Your baby may still have a cough and remain chesty and wheezy for some time but this will settle down gradually.

Bronchiolitis does not usually cause long-term breathing problems.

Useful contacts

NHS 24
Phone: 08454 242424 • www.nhs24.com
Provides health advice and information.

Scottish Intercollegiate Guidelines Network, 28 Thistle Street, Edinburgh EH2 1EN • www.sign.ac.uk

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	**Does the procedural document affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	**Is there any evidence that some groups are affected differently?**	Yes	Infants who ere born premature are at higher risk
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the procedural document likely to be negative?**	No	
5.	**If so can the impact be avoided?**	N/A	
6.	**What alternatives are there to achieving the procedural document without the impact?**	N/A	
7.	**Can we reduce the impact by taking different action?**	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	**Title**		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	**Rationale**		
	Are reasons for development of the document stated?	Yes	
3.	**Development Process**		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4.	**Content**		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
5.	**Evidence Base**		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
6.	**Approval**		
	Does the document identify which committee/ group will approve it?	Yes	
7.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?	Yes	

	Title of document being reviewed:	Yes/No	Comments
8.	**Document Control**		
	Does the document identify where it will be held?	Yes	
9.	**Process to Monitor Compliance and Effectiveness**		
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	
	Is there a plan to review or audit compliance with the document?	Yes	
10.	**Review Date**		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

Executive Sponsor Approval			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
Relevant Committee Approval			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
Responsible Committee Approval – only applies to reviewed procedural documents with minor changes			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need complete a report ? How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	**Lead**	**Tool**	**Frequency**	**Reporting arrangements**
A) General adherence to guideline B) Use Optiflow (HFNO)	Dr John Moreiras	We already have a HDU Audit tool. Will add use of opitflow to it. Bronchiolitis specific audit	→ yearly → Every 2 years	Paediatric clinical governance group.