Bronchiolitis Pathway

Clinical Assessment / Management Tool for Children Younger than 1 year old with suspected Bronchiolitis

Healthier Together
Iachach Gyda'n Gilydd

NHS

Management - Primary Care and Community Settings

Patient Presents

Suspected Bronchiolitis?

- Snuffly Nose
- Poor feeding
- Pyrexia
- Head bobbing
- Bronchiolitis Season
- Chesty Cough
- Vomiting
- Increased work of breathing
- Cyanosis
- Inspiratory crackles +/- wheeze

Risk factors for severe disease

- Pre-existing lung condition
- Immunocompromised
- Congenital Heart Disease
- Age <6 weeks (corrected)
- Re-attendance
- Prematurity <35 weeks
- Neuromuscular weakness

Do the symptoms and/or signs suggest an immediately life threatening (high risk) illness?

Yes

- **Refer immediately** to emergency care by **999**
- Alert Paediatrician
- Stay with child whilst waiting and give **High-Flow Oxygen** support

Consider differential diagnosis if - temp ≥38°C (sepsis) or sweaty (cardiac) or unusual features of illness

Table 1

Clinical Findings	Green - low risk	Amber - intermediate risk	Red - high risk
Behaviour	• Alert • Normal	• Irritable • Decreased activity • Reduced response to social cues • No smile	• Unable to rouse • No response to social cues • Appears ill to a healthcare professional • Wakes only with prolonged stimulation • Weak or continuous cry
Skin	• CRT < 2 secs • Normal colour skin, lips and tongue • Moist mucous membranes	• CRT 2-3 secs • Pallor colour reported by parent/carer • Pale/mottled • Cool peripheries	• CRT > 3 secs • Cyanotic lips and tongue • Pale/Mottled/Ashen blue
Respiratory Rate	• Under 12mths <50 breaths/minute • Mild respiratory distress	• Increased work of breathing • All ages > 60 breaths /minute	• All ages > 70 breaths/minute • Respiratory distress
O_2 Sats in air**	• 95% or above	• 92-94%	• <92%
Chest Recession	• Mild	• Moderate	• Severe
Nasal Flaring	• Absent	• May be present	• Present
Grunting	• Absent	• Absent	• Present
Feeding Hydration	• Normal - Tolerating 75% of fluid • Occasional cough induced vomiting	• 50-75% fluid intake over 3-4 feeds • Reduced urine output	• <50% fluid intake over 2-3 feeds / 12 hours or appears dehydrated • Significantly reduced urine output
Apnoeas	• Absent	• Absent	• Yes
Other		• Pre-existing lung condition • Immunocompromised • Congenital Heart Disease • Age <6 weeks (corrected) • Re-attendance • Prematurity <35 weeks • Neuromuscular weakness • Additional parent/carer support required	

Table 2 Normal Paediatric Values: (APLS†)

	Heart Rate [bpm]	Respiratory Rate at rest: [b/min]	Systolic Blood Pressure [mmHg]
< 1 year	110 - 160	30 - 40	70 - 90
1-2 years	100 - 150	25 - 35	80 - 95

† Advanced Paediatric Life Support The Practical Approach Fifth Edition Advanced Life Support Group Edited by Martin Samuels, Susan Wieteska Wiley-Blackwell / 2011 BMJ Books.

Also think about...

Babies with bronchiolitis often deteriorate up to Day 3. This needs to be considered in those patients with risk factors for severe disease

Green Action

Provide appropriate and clear guidance to the parent/carer and refer them to the patient advice sheet.
Confirm they are comfortable with the decisions/advice given and then think "Safeguarding" before sending home.

Amber Action

Advice from Paediatrician should be sought and/or a clear management plan agreed with parents.

Refer

Manage

Management Plan

- Provide the parent/carer with a safety net: use the advice sheet and advise on signs and symptoms and changes and signpost as to where to go should things change
- Consider referral to acute paediatric community nursing team if available
- Arrange any required follow up or review and send any relevant documentation to the provider of follow-up or review

Urgent Action

Consider commencing high flow oxygen support
Refer immediately to emergency care – consider 999
Alert Paediatrician
Commence relevant treatment to stabilise child for transfer
Send relevant documentation

999

Hospital Emergency Department / Paediatric Unit

GMC Best Practice recommends: Record your findings (See "Good Medical Practice" http://bit.ly/1DPXI2b)
**NB: Oximetry is an important part of the assessment and should be measured with an oximeter appropriately designed for infants if available.

First Draft Version: May 2011 Date of this Refreshed Version: May 2016 (from Nov 2013) Review Date: May 2018.

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Glossary of Terms	
ABC	Airways, Breathing, Circulation
APLS	Advanced Paediatric Life Support
AVPU	Alert Voice Pain Unresponsive
B/P	Blood Pressure
CPD	Continuous Professional Development
CRT	Capillary Refill Time
ED	Hospital Emergency Department
GCS	Glasgow Coma Scale
HR	Heart Rate
MOI	Mechanism of Injury
PEWS	Paediatric Early Warning Score
RR	Respiratory Rate
WBC	White Blood Cell Count