

Annex 1 Management of Bronchiolitis in Hospital

DIAGNOSIS

The diagnosis of bronchiolitis is clinical. Chest x-rays and virologic tests should NOT be used to diagnose bronchiolitis.
Bronchiolitis is likely if a child aged <18 months presents with:

- Initial signs and symptoms of an upper respiratory tract infection
- Cough
- Tachypnoea
- Inspiratory crepitations
- Wheeze

Consider alternate diagnoses in a child who presents with:

- Recurrent wheezing
- Cough as the predominant symptom
- Persistent, or repeated and prolonged, respiratory symptoms
- Failure to thrive
- Cardiac murmur, oedema or a history of slow onset of symptoms
- Sudden onset of symptoms, history of coughing/choking followed by expiratory wheeze, loss of voice, or differential air entry

Trial Of Bronchodilator Therapy

A child with bronchiolitis-like symptoms who responds to treatment with a bronchodilator is likely to have asthma. Consider a trial of a single dose of β_2 agonist bronchodilators in patients older than 9 months, particularly with recurrent wheezing.

ASSESSMENT OF SEVERITY OF DISEASE

Mild	Moderate	Severe	Life Threatening
<ul style="list-style-type: none"> • Normal respiratory rate • No or subtle accessory muscle use • Normal heart rate[#] • Able to feed • <i>Oxygen saturation >95%</i> 	<ul style="list-style-type: none"> • Increased respiratory rate • Minor accessory muscle use • Increased heart rate[#] • Difficulty feeding • Minor dehydration • Crepitations • <i>Oxygen saturation 90-95%</i> 	<ul style="list-style-type: none"> • Markedly increased respiratory rate • Moderate/marked accessory muscle use • Nasal flare and/or grunting • Markedly increased heart rate[#] • Unable to feed • Marked dehydration • Toxic appearance • Sweaty • Irritable • <i>Oxygen saturation <90%</i> 	<ul style="list-style-type: none"> • Cyanosis • Poor respiratory effort • Maximal accessory muscle use/exhaustion • Apnoeas

N.B. If patient has signs or symptoms across categories, always treat according to their most severe features. Treatment should not be based on a child's oxygen saturation alone.

Take special care with children <3 months old or born at <36 weeks gestation, and those who have underlying cardiorespiratory disease as they have an increased risk of more severe disease and apnoea. Consider virologic testing to guide management in young febrile infants.

INITIAL TREATMENT

<ul style="list-style-type: none"> • Encourage small frequent feeds • Discharge • If reason not to discharge (e.g. criteria to take special care as above) reassess within 1 hour 	<ul style="list-style-type: none"> • Consider oxygen if child is <3 months old, has increased work of breathing, decreased oxygenation during feeds or saturation 90-92% 	<ul style="list-style-type: none"> • Consult senior medical staff • Give oxygen if saturation <90% • Consider oxygen if child is <3 months old, has increased work of breathing, decreased oxygenation during feeds or saturation 90-92% 	<ul style="list-style-type: none"> • Consult Intensive Care Unit • Give oxygen
	<ul style="list-style-type: none"> • Encourage small frequent feeds • If not tolerating oral feeds, consider nasogastric (NG) usual fluids or intravenous (IV) fluids if increased work of breathing • If nasal congestion, trial saline nasal drops & consider suctioning • Discharge if NOT requiring oxygen or NG or IV fluids • If reason not to discharge, reassess within 1 hour 	<p>Give oxygen at the lowest flow rate required to maintain saturations between 92-95%. If requiring oxygen at >0.5L/min, provide continuous pulse oximetry.</p> <ul style="list-style-type: none"> • If requiring oxygen therapy above 40%, consult ICU. • Consider nasogastric (NG) usual fluids or intravenous (IV) fluids if increased work of breathing • If circulatory compromise or severe dehydration discuss fluids with senior medical staff • Consider blood gas analysis • If nasal congestion, trial saline nasal drops & consider suctioning • Reassess within 1 hour 	<ul style="list-style-type: none"> • Give intravenous (IV) fluids • If circulatory compromise or severe dehydration discuss fluids with senior medical staff • Perform blood gas analysis • Request urgent chest x-ray • Reassess within 15 minutes

ONGOING TREATMENT

<p>IF STABLE/IMPROVING:</p> <ul style="list-style-type: none"> • Provide oxygen and/or fluid therapy as per above criteria • Discharge when not requiring oxygen or fluid therapy • Provide patient information, including reasons to return to hospital • Fax or post letter to GP and other relevant specialists 	<p>IF DETERIORATING:</p> <ul style="list-style-type: none"> • Consult senior paediatric or emergency medical staff • Reconsider diagnosis • Consider chest x-ray, blood and urine cultures and/or antibiotics
---	---