

Inclusion criteria: Age less than 12 months presenting with first or second episode of bronchiolitis with typical clinical presentation and examination. Patients usually have a history of cough, nasal congestion, difficulty breathing or drinking. On examination the patients have signs of lower respiratory tract disease with tachypnea, retractions, wheezing or crackles.

Exclusion criteria: Prior diagnosis of asthma, cystic fibrosis, chronic lung disease, hemodynamically significant congenital heart disease (patients who are receiving medication to control CHF, have moderate to severe pulmonary hypertension or have cyanotic heart disease) immunodeficiency, neuromuscular disease, **appears toxic or critically ill.**

Absolute admission criteria

- Parent or clinician witnessed apnea prior to admission
- Born < 37 weeks GA and younger than 48 weeks post-conception
- Age < 1 month
- **RA sat persistently <92% (quiet and awake)**
- RR >70 persistently
- Severe retractions
- Unable to feed by history and observation

Relative admission criteria (strongly consider admission if > one criteria):

- GA <37 weeks
- Age less than 3 months
- Difficulty feeding by history and observation
- RA sat persistently **92-93%** awake
- RR persistently > 60
- Moderate retractions (Definition *mild* = takes you a few seconds to decide if really retracting; *moderate* = obvious to all; *severe* = pulling hard, your heart rate is slightly elevated, you are considering moving to the resuscitation room.)

Discharge criteria:

- RR < 60
- Oxygen saturations **>= 92% awake**
- Retractions resolved or mild
- Well hydrated and able to drink well enough to maintain adequate hydration

Testing/Monitoring

- **Continuous pulse oximetry only recommended if severe respiratory distress (sats < 92%, RR > 70, poor aeration, severe retractions), <2 months old, or at the clinician's discretion.**
- Routine use of chest radiographs is not recommended (consider if severe or very atypical presentation, evidence of congenital or acquired heart disease, e.g. myocarditis or cardiomyopathy).
- Routine use of viral testing is not recommended
- Routine use of CBC, electrolytes, blood gases are not recommended

Therapies

- Administer oxygen if oxygen saturations persistently <92% or severe respiratory distress (RR > 70, poor aeration, severe retractions). If oxygen administered, keep sats >95%
- **American Academy of Pediatrics recommends that albuterol should not be administered**
- **Nasogastric feeding** or IV therapy if patient cannot maintain hydration orally.

Not recommended:

- Systemic corticosteroids
- **Inhaled albuterol**
- Aerosol therapy with normal saline
- **Deep suctioning**
- 3% saline unless patient is being admitted
- Cool mist therapy
- Chest physiotherapy
- Antibiotics
- Anticholinergic medications

NOTES:

This guideline was developed for educational purposes only and for use in the Division of Emergency Medicine program at Boston Children's Hospital. Decisions about evaluation and treatment are the responsibility of the treating clinician and should always be tailored to individual clinical circumstances.

