Evaluation and Treatment of Children with Bronchiolitis in the Emergency Department

1/06/2016

Suspected bronchiolitis: *Otherwise healthy child* < 24 months of age with prodrome of viral URI progressing to lower respiratory involvement

- Increased work of breathing
- Tachypnea
- Wheezing
- Crackles

Assessment of disease severity

		Mild	Moderate	Severe
RR	< 3 months	30 - 60	61 – 80	> 80
	3 – 12 months	25 - 50	51 - 70	> 70
	1 – 2 years	20 - 40	41 - 60	> 60
WOB		Normal or mild increase	Intercostal retractions	Nasal flaring, grunting, head bobbing
Mental status		Baseline	Fussy	Lethargic or inconsolable
Breath sounds		Clear	Crackles, wheezing	Diminished breath sounds or significant crackles, wheezing

All patients and caregivers should receive:

- Education on clearance of nasal secretions by bulb suction
- Antipyretics if needed
- **Frequent re-assessments**
- Smoking cessation counseling, if applicable

For moderate to severe symptoms:

- Observe 1-2 hours on pulse oximetry, then decide to admit or discharge

Based on the 2014 Clinical Practice Guidelines for the Diagnosis, Management, and Prevention of Bronchiolitis published by the American Academy of Pediatrics and "ED Clinical Pathway for Evaluation/Treatment of Children with Bronchiolitis" developed by Children's Hospital of Philadelphia.

Other interventions for specific indications only

Supplemental oxygen	Saturations persistently < 90% when awake or < 88% while asleep after suctioning and repositioning
Supplemental fluids	Inadequate PO intake. Consider NG feeds
Albuterol	**Not routinely recommended**. ***Consider*** if history of recurrent wheezing, age > 12 months
Racemic epinephrine	Increasing severe respiratory distress
Antibiotics	Evidence of bacterial superinfection (not common)
Hypertonic saline	**Not routinely recommended**
Systemic or inhaled steroids	**Not routinely recommended**
Chest X-ray	**Not routinely recommended**. ***Consider*** if • Atypical clinical course • New fever late in disease process • Severe disease and probable PICU admission
Viral respiratory panel, including RSV testing	**Not routinely recommended**. ***Consider*** testing for flu if high local flu activity and/or clinical suspicion of flu
Pertussis PCR	**Not routinely recommended**. ***Consider*** if • Significant pertussis activity in the community • Known exposure • History of apnea • Unimmunized

Discharge criteria:

- Sats > 90% when awake
- Adequate PO
- Mild/moderate work of breathing
- Reliable caretaker
- Able to obtain follow-up care

Admission criteria:

- Need for supplemental oxygen
- Need for IV/NG rehydration
- At risk for progression
  - Significant chronic illness
  - Respiratory rate > 60–70
- Consider in very young infants (< 3 months of age) presenting with significant symptoms early in disease course