

Wheezing

(Asthma/ Bronchospasm/ RAD/ Bronchiolitis)

Moderate Wheezing

1. **O2 humidified**; IV hydration (fluid bolus); Chest PT if secretions loose.
2. **Albuterol 10 mg (2.5mg is the unit dose)** in 2.5cc normal saline nebulized.
 - Mild asthma: <1yr: 0.1-0.15 mg/kg/dose or unit dose of 2.5mg
 - Mild asthma with home nebs If home nebs of 2.5mg vials used: may start with 5-10mg SVN.
3. **Xopenex** not recommended unless family insistent or child with cardiac disease. If child is able to tolerate albuterol 5mg, consider increasing xopenex to 1.25mg. (typical pediatric dose = 0.615mg). High cost and limited/ questionable benefit of cardiac side effects makes xopenex a less desirable drug to be used in the acute setting.
4. **Atrovent 0.25mg (unit dose)** in 2.5cc saline nebulized (0.25mg to 0.5mg/dose if >12yo). May repeat with albuterol. Recommended 1-2X. **Avoid Atrovent MDI if allergic to soy or peanuts.**
5. **Steroids:** Solu-Medrol 2mg/kg IV (adult max 250mg), or Prednisone/ Prelone 2mg/kg PO (max 60mg), or Decadron 0.6mg/kg PO, IV, IM (max 16mg). Oral preferred if tolerated.
6. **Epinephrine 0.01cc/kg SC (1:1000; maximum dose 0.3cc)** every 15 minutes up to 3 doses, if poor air movement or unable to tolerate nebs. More common use in infants when uncertain of mask staying on or not tolerating nebulized treatments.
7. **Pulmicort Respules (neb):** >1yr old, 0.5mg/24hr divide QD-BID. If used, this is to be used in conjunction with systemic steroids.

Severe or Refractory Wheezing/ Bronchospasm: (in addition to above recommendations)

1. ICU referral
2. Continuous Nebulization:
 - Severe (ALOC, pCO₂>40): **Albuterol 20mg (4cc) without saline SVN until patient improves then Albuterol 15-30 mg (3-6cc) Q1hr continuous.**
3. Impending respiratory failure:
 - **Epinephrine SC:** see above.
 - **Magnesium 25-50mg/kg IV (max 2gm)** over 30 min-1hr.
 - **Terbutaline 2-10mcg/kg IV bolus** and subsequent infusion 0.1-0.5 mcg/kg/min.
 - **Heliox (70-80% Helium/ 30-20% Oxygen).** Avoid if hypoxic.
 - **Rapid sequence intubation:** using ketamine for sedation.

Bronchiolitis (1mo-1yo) (Check RSV)

1. Albuterol nebs as above; steroids may or may not be helpful. For continued distress, **If racemic epi available (2.25%):** 0.05 cc/kg/dose (max 0.5cc/dose) in 3cc NS over 15 minutes. If no racemic epi consider **nebulized epinephrine** (0.5cc/kg of 1:1000 epi in 3cc NS). Maximum dose 2.5cc for < 4yr old and Maximum dose of 5cc for >4yrs old. (**see Stridor sheet**)
2. Frequent and aggressive bulb suction with saline nasal drops.