

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	Document #	9003.14
	<u>PROGRAM DOCUMENT:</u>  <b>Pediatric</b> <b>Respiratory Distress: Reactive Airway Disease,</b> <b>Asthma, Bronchospasm, Croup, or Stridor</b>	Draft Date:	04/25/95
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 EMS Medical Director

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 EMS Administrator

**Purpose:**

- A. To serve as the treatment standard for pediatric patients assessed to have respiratory distress and a history of asthma, bronchospasm, or reactive airway disease.
- B. To serve as a treatment standard for pediatric patients assessed to have respiratory distress with no history of asthma, bronchospasm, or reactive airway disease but are wheezing and tachypneic.
- C. To serve as a treatment standard for pediatric patients assessed to have slow onset of respiratory distress, barking cough, with a history of fever and respiratory stridor.

**Authority:**

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

**Protocol:**

Treat a single problem; commit yourself to a single assessment and if in doubt contact medical control for advice.

- A. **Asthma/Bronchospasm - Mild or Moderate:**  
 Patient present with intercostal retractions, nasal flaring and capillary refill > 2 seconds.

**BLS TREATMENT**

**Supplemental O2** as necessary to maintain SpO2  $\geq$  94%. Use the lowest concentration and flow rate of O2 as possible.  
**Begin immediate transport** in position of comfort.

**ALS TREATMENT**

**Albuterol: 2.5 mg (3 ml unit dose):**  
 Hand Held Nebulizer (HHN); reassess after the first treatment. May be repeated as needed, based on reassessment.  
**Pulse Oximetry**, when available, may be used to titrate oxygen saturation for SpO2 < 94%.  
**Cardiac Monitoring.**

1. **Asthma/Bronchospasm - Condition is severe:** Immediate transport.  
Patient is unable to speak, patient may have decreased/elevated pulse and/or decreased/elevated blood pressure; mental status is altered.

### **BLS TREATMENT**

**Basic Life Support (BLS) airway** interventions as needed.  
**Supplemental O2** as necessary to maintain SpO2  $\geq$  94%. Use the lowest concentration and flow rate of O2 as possible.  
**Begin immediate transport** in position of comfort.

### **ALS TREATMENT**

**Advanced Life Support (ALS) airway** interventions as needed.  
**Pulse Oximetry**, when available, may be used to titrate oxygen saturation for SpO2  $<$ 94%.  
**Albuterol:**  
2.5 mg (3 ml unit dose) HHN continuously.  
**Epinephrine:**  
0.01 mg/kg of 1:1,000  
(1 mg/ml) solution Intramuscular (IM) up to a maximum dose of 0.3 ml.  
**Initiate Intravenous (IV) access** with saline lock.  
If needed, attach Normal Saline (NS) and titrate to a minimal Systolic Blood Pressure (SBP) for patient's age. Establishment of IV shall not take precedence over administration of Albuterol or Epinephrine.  
**Cardiac Monitoring.**

B. **Croup/Stridor - Condition is mild to moderate:**  
Slow onset of mild to moderate respiratory distress, barking cough, fever and respiratory stridor. Unilateral stridor may be due to bronchial foreign body.

### **BLS TREATMENT**

**BLS airway** interventions as needed.  
**Supplemental O2** as necessary to maintain SpO2  $\geq$  94%. Use the lowest concentration and flow rate of O2 as possible.  
**Transport** in position of comfort.

### **ALS TREATMENT**

**Normal Saline:** 3ml HHN reassess after first treatment.

1. **Croup/Stridor - Condition is severe:**

Patient is unable to speak/ patient may have decreased/elevated pulse and/or decreased/elevated blood pressure/ mental status is altered. Unilateral stridor may be due to bronchial foreign body.

**BLS TREATMENT**

**BLS airway** interventions as needed.

**Supplemental O<sub>2</sub>** as necessary to maintain SpO<sub>2</sub> ≥ 94%. Use the lowest concentration and flow rate of O<sub>2</sub> as possible.

**Begin immediate transport** in position of comfort

**ALS TREATMENT**

**ALS airway** interventions as needed.

**Pulse Oximetry**, when available, may be used to titrate oxygen saturation for SpO<sub>2</sub> < 94%.

**Epinephrine:**

0.01 mg/kg of 1:1,000 (1mg/ml) solution IM up to a maximum dose of 0.3 ml.

**Initiate Intravenous (IV) access** with saline lock.

If needed, attach Normal Saline (NS) and titrate to a minimal Systolic Blood Pressure (SBP) for patient's age. (Establishment of IV shall not take precedence over administration of Epinephrine).

**Cardiac Monitoring.**

**Cross Reference:** Pediatric Airway Management: PD# 8837