

	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9003.17
	<u>PROGRAM DOCUMENT:</u> Pediatric Respiratory Distress: Reactive Airway Disease, Asthma, Bronchospasm, Croup, or Stridor	Initial Date:	04/25/95
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Signature on File

EMS Medical Director

Signature on File

EMS Administrator

Purpose:

- A. To establish a treatment standard for pediatric patients assessed to have respiratory distress and a history of asthma, bronchospasm, or reactive airway disease.
- B. To establish 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 establish 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 presents with intercostal retractions, nasal flaring and capillary refill > 2 seconds.

BLS
<ol style="list-style-type: none"> 1. Supplemental O₂ as necessary to maintain SpO₂ ≥ 94%. Use lowest concentration and flow rate of O₂ as possible. 2. Assess vital signs, including SpO₂ when available. 3. Assess lung sounds. 4. Consider Noninvasive Ventilation (NIV) when appropriate, for moderate to severe distress (patient's ≥ twelve (12) years of age only). 5. Begin immediate transport.
ALS
<ol style="list-style-type: none"> 1. Albuterol: 2.5 mg (3 ml unit dose): <ul style="list-style-type: none"> • Nebulizer (HHN), or mask; reassess after the first treatment. May be repeated as needed, based on reassessment. 2. Pulse Oximetry, when available, may be used to titrate oxygen saturation to a SpO₂ ≥ 94%. 3. Cardiac monitor. 4. Consider vascular access.

- B. **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
<ol style="list-style-type: none"> 1. Basic Life Support (BLS) airway interventions as needed. 2. Supplemental O₂ as necessary to maintain SpO₂ ≥ 94%. Use lowest concentration and flow rate of O₂ as possible. 3. Assess vital signs, including SpO₂ when available. 4. Consider NIV, when appropriate, for moderate to severe distress (patient's ≥ twelve (12) years of age only). 5. Consider administering Epinephrine auto-injector if needed: <ul style="list-style-type: none"> • > 30 kg Epinephrine Auto Injector 0.3 mg IM. No repeat. Record time of injection. • 15-30kg Pediatric Epinephrine Auto Injector 0.15 mg IM. No repeat. Record time of injection. 6. Begin immediate transport in position of comfort.
ALS
<ol style="list-style-type: none"> 1. Airway management as per PD# 8837- Pediatric Airway Management. 2. Pulse Oximetry, when available, may be used to titrate oxygen saturation to a SpO₂ ≥ 94%. 3. Albuterol: 5 mg via HHN, mask or BVM. 4. Epinephrine: 0.01 mg/kg of 1:1,000 (1 mg/ml) solution Intramuscular (IM) up to a maximum dose of 0.3 ml. 5. Initiate vascular access. Titrate to a minimal Systolic Blood Pressure (SBP) for patient's age. Vascular access shall not take precedence over administration of Albuterol or Epinephrine. 6. Cardiac Monitor.

- C. **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
<ol style="list-style-type: none"> 1. Basic Life Support (BLS) airway interventions as needed. 2. Supplemental O₂ as necessary to maintain SpO₂ ≥ 94%. Use lowest concentration and flow rate of O₂ as possible. 3. Assess vital signs, including SpO₂ when available. 4. Begin immediate transport in position of comfort.
ALS
<ol style="list-style-type: none"> 1. Saline: 3ml HHN reassess after first treatment.

D. 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
<ol style="list-style-type: none">1. Basic Life Support (BLS) airway interventions as needed.2. Supplemental O2 as necessary to maintain SpO2 \geq 94%. Use lowest concentration and flow rate of O2 as possible.3. Assess vital signs, including SpO2 when available.4. Begin immediate transport in position of comfort.
ALS
<ol style="list-style-type: none">1. Airway management as per PD# 88372. Pulse oximetry, when available, will be used to titrate oxygen saturation to SpO2 \geq 94%.3. Epinephrine: 0.01 mg/Kg of 1:1,000 (1mg/ml) solution IM up to a maximum dose of 0.3 ml.4. Initiate vascular access. Titrate to a minimal Systolic Blood Pressure (SBP) for patient's age. Vascular access shall not take precedence over administration of Epinephrine.5. Cardiac Monitoring.

Cross Reference: PD# 8837 – Pediatric Airway Management
PD# 8829 – Noninvasive Ventilation (NIV)