

**ORANGE COUNTY EMS
PARAMEDIC PHARMACOLOGY HANDBOOK**

MEDICATION: ALBUTEROL (Proventil or Ventolin)	ADULT DOSE	PEDIATRIC DOSE	SIDE EFFECTS	PRECAUTIONS/COMMENTS
<p>CLASSIFICATION: Sympathomimetic bronchodilator (Beta-2 Agonist)</p> <p>MECHANISM OF ACTION:</p> <ul style="list-style-type: none"> Beta adrenergic receptor stimulant; beta-2 effects (bronchodilation) dominating over beta-1 effects (increased heart rate). <p>INDICATIONS:</p> <ul style="list-style-type: none"> Asthma/COPD. Bronchospasm/wheezing/reactive airway disease. Crush injury (to reverse potential hyperkalemia) <p>DOSAGE FORMS:</p> <ul style="list-style-type: none"> 3.0 mL (2.5 mg) of a 0.083% solution unit dose Metered Dose Inhaler (MDI), 90 mcg./puff, with spacer 	<ul style="list-style-type: none"> 3.0 mL (2.5 mg) of a 0.083% solution via nebulizer. May repeat. 3.0 mL (2.5 mg)-6.0 mL (5 mg) of a 0.083% solution via nebulizer for severe asthma. Continuous Albuterol for severe distress or impending respiratory failure. Albuterol Metered Dose Inhaler (MDI) with spacer alternative delivery system (e.g. Fireline Paramedic or use during outbreak of airborne-transmissible respiratory disease): 5-10 puffs (90 mcg./puff) albuterol MDI with spacer every 5 minutes. 	<ul style="list-style-type: none"> 3.0 mL (2.5 mg) of a 0.083% solution via nebulizer. May repeat. Continuous Albuterol for severe distress or impending respiratory failure. Albuterol Metered Dose Inhaler (MDI) with spacer alternative delivery system (e.g. Fireline Paramedic, or use during outbreak of airborne-transmissible respiratory disease): 5-10 puffs (90 mcg./puff) albuterol MDI with spacer every 5 minutes. 	<ul style="list-style-type: none"> Palpitations, tachycardia, nausea, and/or nervousness. Use caution in patients with known heart disease. 	<p>METHOD OF ADMINISTRATION</p> <ul style="list-style-type: none"> Pt. not in need of ventilatory support (BVM or ETT): <ul style="list-style-type: none"> Place pre-mixed solution in acorn nebulizer with mouthpiece or mask. Connect acorn nebulizer to oxygen supply at 6 L/min until mist is visible. Pt. in need of ventilatory support via BVM or ETT: <ul style="list-style-type: none"> Two oxygen sources are required; when only one oxygen source is available connect to BVM to provide high flow O₂. Albuterol may be administered when second O₂ source is available. Place pre-mixed solution in acorn nebulizer and assemble, excluding the mouthpiece. Place 15 mm I.D. adaptor into corrugated tubing to be connected to ventilation bag mask or ET tube. Place 22 mm I.D. adaptor on the opposite end of the "T" piece of the nebulizer. Connect oxygen supply to BVM. Connect ventilation bag to 22 mm I.D. adaptor and begin ventilatory support. Connect acorn nebulizer to oxygen supply at 6 L/min or until mist is visible. <p>OPTION</p> <ul style="list-style-type: none"> Isothermal Omni-flex Patient Connector or Ventilator Elbow can be connected to the end of the 15 mm I.D. adaptor for easier connection to the ETT or BVM mask.

