

## Ventolin

<b>Generic Name: Salbutamol (Canada), albuterol sulfate</b>
<b>Trade Name: Ventolin</b>
<b>Classification: bronchodilator, beta<sub>2</sub>-selective adrenergic agonist (sympathomimetic)</b>
<b>Supplied: 2.5 ml nebulizer (1 mg/ml), MDI 100 mcg/spray, Combivent (Ventolin 2.5 mg/Atrovent 500 mcg)</b>
<b>Actions (Pharmacodynamics):</b> <ul style="list-style-type: none"> <li>• Selectively stimulates beta-adrenergic receptors of the lungs, uterus, and vascular smooth muscle</li> <li>• Bronchodilation results from relaxation of the vascular smooth muscles, which relieves bronchospasm and reduces airway resistance</li> <li>• Higher doses will drive serum potassium (K<sup>+</sup>) into the cells.</li> </ul>
<b>Indications:</b> <ul style="list-style-type: none"> <li>• Bronchospasm due to bronchial asthma, chronic bronchitis and other chronic bronchopulmonary disorders</li> <li>• Respiratory distress with bronchospasm</li> </ul>
<b>Dosage:</b> <b>Adult: 2.5 – 5.0 mg nebulizer – repeat q 10 minutes prn</b> <b>MDI minimum 6 puffs max 20</b> <b>Pediatric(ages 1 – 4): 0.15 mg/kg diluted to 2.5 ml saline via nebulizer</b> <b>or &lt; 10 kg give 1.25 mg with NS to 2.5 ml</b> <b>10-20 kg give 2.5 mg</b> <b>&gt; 20 kg give 2.5 – 5.0 mg</b> <b>MDI (pediatrics) minimum 2 puff max 10</b> <b>Pediatric(ages 5-11): 25-250 mcg via nebulizer with salbutamol (mixed) repeat up to times two if necessary</b>
<b>Route: Nebulizer or metered dose inhaler</b>
<b>Contraindications:</b> <ul style="list-style-type: none"> <li>• Hypersensitivity</li> </ul>
<b>Precautions:</b> <ul style="list-style-type: none"> <li>• Should not be used with patients presenting with acute heart failure</li> <li>• Cardiovascular disease – cardiac dysrhythmias, hypertension</li> <li>• Diabetes mellitus – risk of drug induced hyperglycemia</li> <li>• Hypokalemia – risk further reducing serum potassium levels and possible adverse cardiovascular events</li> </ul>