

## 2007 KCQIC Guidelines for Quick Relief Medications Asthma in Youth > 12 years of age and Adults

Medication	Dose Form	Adult Dose	Comments
<b>Inhaled Short-Acting Beta<sub>2</sub> Agonist</b>	<b>MDI</b>		
<ul style="list-style-type: none"> <li>• Albuterol CFC</li> <li>• Albuterol HFA</li> <li>• Pirbuterol CFC (Maxair<sup>®</sup>)</li> <li>• Levalbuterol HFA (Xopenex<sup>®</sup>)</li> </ul>	<p>90 mcg/puff 200puffs/canister</p> <p>90 mcg/puff 200puffs/canister</p> <p>200 mcg/puff 400 puffs/c</p> <p>45 mcg/puff 200 puff/canister</p>	<ul style="list-style-type: none"> <li>• <b>2 puffs</b> <b>5 minutes before exercise</b></li> <li>• <b>2 puffs every 4-6 hours as needed</b></li> </ul>	<p><b>Applies to all four SABAs</b></p> <ul style="list-style-type: none"> <li>• An increasing use or lack of expected effect indicates diminished control of asthma</li> <li>• Not recommended for long-term daily treatment. Regular use exceeding 2 days/week for symptom control (not prevention EIB) indicates the need to step up therapy.</li> <li>• Differences in potency exist, but all products are essentially comparable on a per puff basis.</li> <li>• May double usual dose for mild exacerbations.</li> <li>• Should prime the inhaler by releasing 4 actuations prior to use.</li> <li>• Periodically clean HFA activator, as drug may block/plug opening. Nonselective agents (i.e., epinephrine, isoproterenol, metaproterenol) are not recommended due to their potential for excessive cardiac stimulation especially in high doses.</li> </ul>
<b>Inhaled Short-Acting Beta<sub>2</sub> Agonist</b>	<b>Nebulizer Solution</b>		
<ul style="list-style-type: none"> <li>• Albuterol</li> <li>• Levalbuterol (R-albuterol) (Xopenex<sup>®</sup>)</li> </ul>	<p>0.63 mg/3mL. 1.25 mg/3mL 2.3 mg/3mL 5 mg/mL (0.5%)</p> <p>0.31 mg/3mL 0.63 mg/3mL 1.25 mg/0.5mL 1.25 mg/3mL</p>	<p><b>1.25 – 5mg in 3 cc of saline q 4-8 hours as needed</b> <b>(Use 15 minutes pre-exercise)</b></p> <p><b>0.63mg – 1.25mg q 8 hours as needed</b></p>	<ul style="list-style-type: none"> <li>• May mix with budesonide inhalant suspension, cromolyn or ipratropium nebulizer solutions. May double dose for severe exacerbations.</li> <li>• Compatible with budesonide inhalant suspension. The product is a sterile-filled, preservative-free, unit dose vial.</li> </ul>

Reference: Expert Panel Report 3 (EPR 3): Guidelines for the Diagnosis and Management of Asthma (2007) National Heart Lung and Blood Institute at <http://www.nhlbi.nih.gov/guidelines/asthma/index.htm>

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Medication	Dose Form	Adult Dose	Comments
<b>Anticholinergics</b>			
<ul style="list-style-type: none"> <li>Ipratropium HFA (Atrovent<sup>®</sup>)</li> </ul>	<b>MDI</b>	<b>2-3 puff q 6 hours 5 minutes before exercise</b>	<ul style="list-style-type: none"> <li>Evidence is lacking for anticholinergics producing added benefit to beta<sub>2</sub> agonist in long-term control asthma therapy.</li> </ul>
	17 mcg/puff 200puffs/canister		
	<b>Nebulizer solution</b>	<b>.25 mg q 6 hours</b>	
	0.25 mg/ml (0.025%) 200puffs/canister		
<ul style="list-style-type: none"> <li>Ipratropium with albuterol (Combivent<sup>®</sup>)</li> </ul>	<b>MDI</b>	<b>2 – 3 puffs q 6 hours</b>	<ul style="list-style-type: none"> <li>Contains EDTA to prevent discoloration of the solution. This additive does not induce bronchospasm.</li> </ul>
	18 mcg/puff of ipratropium bromide and 90 mcg/puff of albuterol  200 puffs/canister		
	<b>Nebulizer solution</b>	<b>3 mL q 4-6 hours</b>	
	0.5 mg/3 mL ipratropium Bromide and 2.5 mg/3 mL albuterol		
<b>Systemic Corticosteroids</b>			
<b>Oral</b>			
<ul style="list-style-type: none"> <li>Methylprednisolone (Medrol<sup>®</sup>)</li> <li>Prednisolone</li> <li>Prednisone</li> </ul>	2, 4, 8, 16, 32 mg tablets	<ul style="list-style-type: none"> <li>Short course “burst”: 40-60 mg/day as single or 2 divided doses for 3-10 days</li> </ul>	<ul style="list-style-type: none"> <li>Short courses or “bursts” are effective for establishing control when initiating therapy or during a period of gradual deterioration.</li> <li>The burst should be continued until symptoms resolve and the PEF is at least 80 percent of person best. This usually requires 3-10 days but may require longer. There is no evidence that tapering the dose following improvement prevents relapse.</li> <li>May be used in place of short burst of oral steroids in patients who are vomiting or if adherence is a problem.</li> </ul>
	5 mg tablets, 5 mg/5cc 15mg/5cc		
	1, 2.5, 5, 10, 20, 50 mg tablets; 5mg/cc, 5mg/5cc		
<ul style="list-style-type: none"> <li>(Methylprednisolone acetate)</li> </ul>	<b>Repository Injection</b>	<b>240 mg IM once</b>	
	40 mg/mL 80 mg/mL		

Key: CFC, chlorofluorocarbon; EIB, exercise-induced bronchospasm; HFA, hydrofluoroalkane; IM, intramuscular; MDI, metered-dose inhaler; PEF, peak expiratory flow.

Reference: Expert Panel Report 3 (EPR 3): Guidelines for the Diagnosis and Management of Asthma (2007) National Heart Lung and Blood Institute at

<http://www.nhlbi.nih.gov/guidelines/asthma/index.htm>