

<p><b>PRESENTATION</b></p> <p>Nebules containing salbutamol 2.5 milligrams/ 2.5ml or 5 milligrams/2.5 ml.</p>	<p><b>INDICATIONS</b></p> <p>Acute asthma attack where normal inhaler therapy has failed to relieve symptoms.</p> <p>Expiratory wheezing associated with allergy, anaphylaxis, smoke inhalation or other lower airway cause.</p> <p>Exacerbation of chronic obstructive pulmonary disease (COPD).</p> <p>Shortness of breath in patients with severe breathing difficulty due to left ventricular failure (secondary treatment).</p>
<p><b>ACTIONS</b></p> <p>Salbutamol is a selective beta2-adrenoreceptor stimulant drug. This has a relaxant effect on the smooth muscle in the medium and smaller airways, which are in spasm in acute asthma attacks. If given by nebuliser, especially if oxygen powered, its smooth-muscle relaxing action, combined with the airway moistening effect of nebulisation, can relieve the attack rapidly.</p>	<p><b>CONTRA-INDICATIONS</b></p> <p>None in the emergency situation.</p>
<p><b>CAUTIONS</b></p> <p>Salbutamol should be used with care in patients with:</p> <p>hypertension.</p> <p>angina.</p> <p>overactive thyroid.</p> <p>late pregnancy (can relax uterus).</p> <p>Severe hypertension may occur in patients on beta-blockers and half doses should be used unless there is profound hypotension.</p>	<p><b>SIDE EFFECTS</b></p> <p>Tremor (shaking).</p> <p>Tachycardia.</p> <p>Palpitations.</p> <p>Headache.</p> <p>Feeling of tension.</p> <p>Peripheral vasodilatation.</p>
<p><b>ADDITIONAL INFORMATION</b></p> <p>In acute severe or life threatening asthma ipratropium should be given concurrently with the first dose of salbutamol. In acute asthma or COPD unresponsive to salbutamol alone a single dose of ipratropium may be given concurrently with the second or later dose of salbutamol.</p> <p>Salbutamol often provides initial relief. In more severe attacks however, the use of steroids by injection or orally and further nebuliser therapy will be required. Do not be lulled into a false sense of security by an initial improvement after salbutamol nebulisation.</p>	

**DOSAGE AND ADMINISTRATION**

**NOTE:** Ensure pre- and post-nebulisation observations including peak flow readings are taken and documented.

**Route:** Nebulised with 6-8 litres per minute oxygen.

AGE	DOSE	CONCENTRATION	
		2.5 milligrams in 2.5ml	5 milligrams in 2.5ml
		VOLUME	VOLUME
Adult (>12-years)	5 milligrams	5.0ml	2.5ml
6 to <12 years	5 milligrams	5.0ml	2.5ml
12-months to <6-years	2.5 milligrams	2.5ml	1.25ml
<12-months	2.5 milligrams	2.5ml	1.25ml

Salbutamol is less effective in children <12 months and a single dose of 2.5 milligrams should be administered. If this is ineffective, further doses should not be given.

In severe attacks nebulisation may need to be repeated as necessary. The pulse rate in children may exceed 140 after significant doses of salbutamol. This is not usually of any clinical significance and should not usually preclude further use of the drug.

Otherwise there is no limit on the maximum number of nebulised doses a patient may have. Repeat doses should, however, be discontinued if the side effects are becoming significant (e.g. tremors, tachycardia >140 beats per minute in adults etc.) This is a clinical decision by the ambulance clinician.

If there is no improvement in peak flow after 5 minutes, administer a further 5 milligrams, nebulised with 6-8 litres per minute oxygen.

**In life threatening or acute severe asthma – do not delay further care.  
LOAD & GO to NEAREST SUITABLE RECEIVING HOSPITAL and provide nebulisation en-route**