

Albuterol (Proventil, Ventolin)

McHenry Western Lake County
EMS



Objectives

- During this session we will discuss:
- Class
- Actions
- Indications
- Contraindications
- Dosing/Routes
- How supplied
- Precautions
- Side effects



Class:

- Adrenergic beta-2 agonist
- Bronchodilator

Actions:

- Causes smooth muscle relaxation in the lungs through the beta-2 agonists.

Beta 2 agonist

- Bronchodilator medicine that opens the airways by relaxing the muscles around the airways that may tighten during an asthma attack or in COPD (chronic obstructive pulmonary disease).



Indications:

- Reversible bronchospasm associated with asthma, COPD, allergic reactions, croup, cystic fibrosis, hyperkalemia.



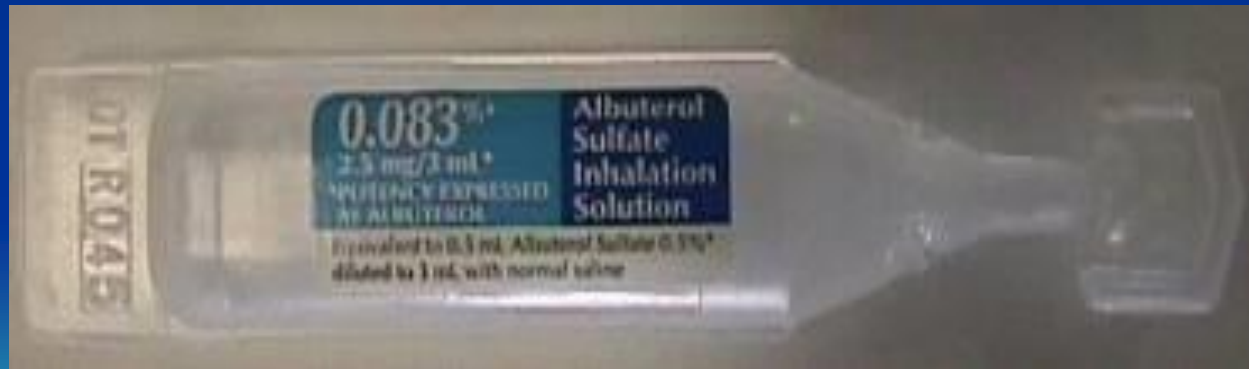
Dosing/Routes:

- For bronchospasm: 2.5 mg in 3ml (0.083%) via HHN with O₂ at 6-8 L depending on unit until mist stops (5-15 minutes). May use HHN, mask or BVM. Continue/repeat en-route.
- For hyperkalemia: 5 mg doses repeated up to 20 mg/neb throughout transport.

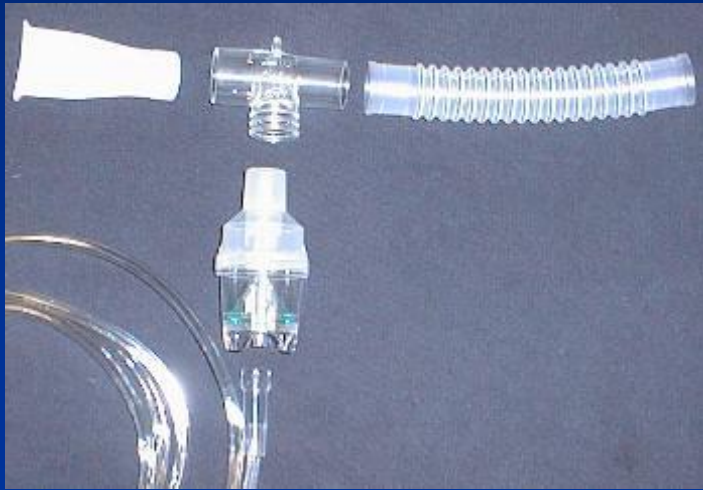


How supplied:

- 0.083% in 3cc (HHN with 2-3cc of NS)



Albuterol set-ups



Contraindications:

- Hypersensitivity. Caution in patients w/ACS, dysrhythmias, symptomatic tachycardia, diabetes, HTN, seizures or in active labor.



Precautions:

- Pregnancy, cardiac disorders, hyperthyroidism, diabetes, hypertension, seizures.



Side effects/adverse reactions:

- CNS: Tremors, anxiety, headache, dizziness, restlessness.
- EENT: Dry nose, irritation of nose and throat
- CV: Palpitations, tachycardia, hypertension, angina, hypotension, dysrhythmias.
- GI: Heartburn, nausea and vomiting
- Ref: MWLCEMS Protocol and 2000 Mosby's Nursing Drug Reference Book



Case Study

- You have been called to a home for a 22 year old male who has experienced an Asthma attack due to Air Fresheners.
- You listen to his lung sounds and you here wheezes in all lung fields with decreased capacity. SP02 is showing 92% on room air.
- What would be the correct dose Albuterol



Answer

- 2.5 mg in 3 ml. (0.083%) via Hand Held Nebulizer (HHN) with O₂ at 6-8 lpm depending on the unit until the mist stops.
- Usually within 5-15 minutes.



- Continue HHN, Mask or BVM method during transport to Hospital.

