

Albuterol Administration Training Program

Central NY EMS Program

Daniel Olsson, DO

Regional Medical Director

Timothy J. Perkins, BS, EMT-P



Program Overview

- Overview of Nebulized Albuterol Administration
- Indications/Contraindications
- Albuterol and Nebulizers
- Administration and Documentation
- Questions

Albuterol Administration

- As of November 1, 2000, the CNY REMAC approved EMTs and EMT-I providers to administer nebulized albuterol for patients with a history of asthma complaining of shortness of breath and wheezing.

Albuterol Sulfate

- Generic Name: Albuterol
- Trade Names: Proventil, Ventolin
- Drug Class: Bronchodilator
- Action: Albuterol dilates bronchial airways by relaxing the surrounding bronchial muscles .

Albuterol Sulfate

- Indication: Per the NYS DOH Protocol, Albuterol is to be administered only for patients between the ages of one and sixty five, who are experiencing an exacerbation of previous diagnosed asthma.
- Caution: Albuterol is used with caution in patients with coronary artery disease, or cardiac arrhythmias.

Albuterol Sulfate

- Preparation: Albuterol is supplied in unit dose vials of 2.5 mg of Albuterol in 3 ml of Normal Saline.



Albuterol Sulfate

- Side Effects: Albuterol can cause side effects including palpitations, fast heart rate, elevated blood pressure, tremor, nausea, nervousness, dizziness, and heart burn. Throat irritation and nose bleeds can also occur.

Nebulizers

- Nebulizers are a form of oxygen/medication administration.
- The nebulizer transforms liquid medication into mist, which allows the patient to inhale the medication into the lungs.

Nebulizers

- Nebulizers can be used one of two ways:
 - Standard Nebulizer
 - Nebulizer, with mouth piece, and hose.
 - “Peace Pipe”
 - Nebulizer with mask
 - Nebulizer, with mask connected
 - Can be used with non-rebreather mask as well.

Nebulizers



Nebulizers



Albuterol Administration

- Per the NYS DOH Protocol, Albuterol is to be administered only for patients between the ages of one and sixty five, who are experiencing an exacerbation of previous diagnosed asthma.
- Request ALS, if available
- **DO NOT DELAY TRANSPORT TO THE APPROPRIATE HOSPITAL.**

Albuterol Administration

- Perform initial patient assessment.
- Assure open airway, and adequate breathing and circulation. If the patient has a compromised airway, do not administer albuterol.

Albuterol Administration

- If the patient is in imminent respiratory failure, refer to the NYS DOH respiratory arrest protocol. (M-8 or M-9 of DOH BLS Protocols)

Albuterol Administration

- Administer high concentration oxygen.
- Place patient in the Fowler's (seated at 45 degrees) or high Fowler's (Seated at 90 degrees) sitting position.
- Do not allow patient to exert themselves in any way.
- Assess vital signs, ability to speak in complete sentences, accessory muscle use, wheezing, patient's assessment of breathing difficulties.
- Transport patient.

Albuterol Administration

- Per NYS DOH Protocol, for patients with a history of Angina, Myocardial Infarction, Arrhythmia or Congestive Heart Failure, medical control **MUST** be contacted prior to administration of Albuterol.

Albuterol Administration

- Administer one (1) unit dose Albuterol 2.5mg in 3ml Normal Saline via nebulizer at a rate of 4 to 6 liters per minute.
- Do not delay transport to complete administration of the medication.

Albuterol Administration

- Re-assess vital signs, ability to speak in complete sentences, accessory muscle use, wheezing, patient's assessment of breathing difficulties.
- If patient's symptoms persist, a second administration of nebulized Albuterol may be administered. A maximum of two (2) total doses may be given.

Albuterol Administration

- Continue to monitor and reassess patient's vital signs and breathing.
- Record all patient care information, including the patient's medical history and all treatment provided on a Prehospital Care Report (PCR).

NYS DOH Protocol

- CNYEMS BLS Protocol
 - <http://www.cnyems.org/Documents/Listings/CNYEMSBLSProtocols.pdf>
- NYS DOH BLS Nebulized Albuterol Protocol
 - <http://www.health.state.ny.us/nysdoh/ems/pdf/albuterol3-05.pdf>

Contact CNYEMS

Central New York EMS Inc.

Jefferson Tower – Suite LL1

50 Presidential Plaza

Syracuse, New York 13202

- Phone # 315-701-5707 (local)
- 1-800-295-2195 (NYS toll free)
- Fax # 315-701-5709
- www.cnyems.org



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QUESTIONS

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