

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Basic**

**SMO: Acute Bronchospasm**

**Overview:** Respiratory distress with acute bronchospasm can be seen in patients as a result of many causes including asthma, COPD, bronchitis, and allergic reaction. Treatment must be concentrated on airway patency and ventilation.

**INFORMATION NEEDED**

- \_\_\_ History: Previous episodes, previous hospitalizations, intubations, fever, sputum production, medications (bronchodilators), exposure (allergens, toxins, fire/smoke), trauma (blunt/penetrating)
- \_\_\_ Symptoms: chest pain, shortness of breath

**OBJECTIVE FINDINGS**

- \_\_\_ Mental status, skin signs, perfusion
- \_\_\_ Respiratory rate, rhythm, pattern and work of breathing
- \_\_\_ Lung sounds
- \_\_\_ Blood pressure, heart rate and rhythm
- \_\_\_ Oxygen saturation
- \_\_\_ Rash, urticaria
- \_\_\_ Evidence of trauma

**TREATMENT**

- \_\_\_ Ensure patent airway
- \_\_\_ Oxygen 10-15L/min via NRB mask (or 2-6 L/min via nasal cannula if mask not tolerated)
- \_\_\_ BVM at 100% O<sub>2</sub>, suction prn
- \_\_\_ Pulse oximetry
- \_\_\_ RMC
- \_\_\_ **Albuterol** 3 mg in 3 cc NS via nebulizer, repeat prn until relief of symptoms
- \_\_\_ For patients 40 yrs and under with no history of coronary artery disease or hypertension, with severe refractory bronchospasm:
  - Consult Medical Control for permission for use of **Epi Pen** 0.3 mg SQ.
- \_\_\_ Rapid transport

**Documentation of adherence to protocol:**

- \_\_\_ Physical finding of wheezing, decreased lung sounds
- \_\_\_ Administration of oxygen
- \_\_\_ Administration of albuterol

<b>Medical Control Contact Criteria</b>
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___ Permission for use of <b>Epi Pen</b> for patients 40 years and under with no known history of coronary artery disease or hypertension.
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**PRECAUTIONS AND COMMENTS**

- Supplemental oxygen should not be withheld in COPD or chronic upper airway obstruction, but it may decrease respiratory rate.
- Epinephrine may cause: anxiety, tremor, palpitations, tachycardia, hypertension and headache. In elderly patients, epinephrine administration may precipitate AMI , hypertensive crisis, intracranial hemorrhage and/or dysrhythmias.

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Paramedic**

**SMO: Acute Bronchospasm**

**Overview:** Respiratory distress with acute bronchospasm can be seen in patients as a result of many causes including asthma, COPD, bronchitis, and allergic reaction. Treatment must be concentrated on airway patency and ventilation.

**INFORMATION NEEDED**

- \_\_\_ History: Previous episodes, previous hospitalizations, intubations, fever, sputum production, medications (bronchodilators), exposure (allergens, toxins, fire/smoke), trauma (blunt/penetrating)
- \_\_\_ Symptoms: chest pain, shortness of breath

**OBJECTIVE FINDINGS**

- \_\_\_ Mental status, skin signs, perfusion
- \_\_\_ Respiratory rate, rhythm, pattern and work of breathing
- \_\_\_ Lung sounds
- \_\_\_ Blood pressure, heart rate and rhythm
- \_\_\_ Oxygen saturation
- \_\_\_ Rash, urticaria
- \_\_\_ Evidence of trauma

**TREATMENT**

- \_\_\_ Ensure patent airway
- \_\_\_ Oxygen 10-15L/min via NRB mask (or 2-6 L/min via nasal cannula if mask not tolerated)
- \_\_\_ BVM at 100% O<sub>2</sub>, suction prn
- \_\_\_ Pulse oximetry
- \_\_\_ RMC
- \_\_\_ **Albuterol** 3 mg in 3 cc NS via nebulizer, repeat prn until relief of symptoms.
- \_\_\_ Obtain IV access in patients with moderate/severe distress.
- \_\_\_ For patients 40 yrs and under with no history of coronary artery disease or hypertension, with severe refractory bronchospasm:
  - Consult Medical Control for permission for use of **Epi Pen** or **Epinephrine (1:10,000)** **0.1 mg** slow IVP over 5 minutes; repeat q 5 min. to maximum of 0.3 mg. If no IV access, Epinephrine (1:1000) 0.3 mg SQ, may repeat in 5 min.
- \_\_\_ Rapid transport

**Documentation of adherence to protocol:**

- \_\_\_ Physical finding of wheezing, decreased lung sounds
- \_\_\_ Administration of oxygen
- \_\_\_ Administration of albuterol
- \_\_\_ IV placement in moderate/severe distress

7/04

Reviewed:

Revised:

EMS/ Region1 SMOs

### Medical Control Contact Criteria

\_\_\_ Permission for use of **Epinephrine** for patients 40 years and under with no known history of coronary artery disease or hypertension.

### PRECAUTIONS AND COMMENTS

- Supplemental oxygen should not be withheld in COPD or chronic upper airway obstruction, but it may decrease respiratory rate.
- Epinephrine may cause: anxiety, tremor, palpitations, tachycardia, hypertension and headache. These may be particularly severe if given IV. In elderly patients, epinephrine administration may precipitate AMI , hypertensive crisis, intracranial hemorrhage and/or dysrhythmias.