EL DORADO COUNTY EMS AGENCY
PREHOSPITAL PROTOCOLS
Effective: July 1, 2015
Reviewed: July, 2015
Revised: July, 2017, 2019

BRONCHOSPASM

ADULT
BLS TREATMENT

**ABCs / ROUTINE MEDICAL CARE** – place patient in position of comfort. If indicated, administer oxygen at the appropriate flow rate to maintain >94%SpO2. Be prepared to support ventilation with appropriate airway adjuncts.

If patient is in severe distress, attempt to assist breathing with BVM after explaining procedure to patient. *(For patients with severe asthma use a slower ventilation rate (6-8 VPM) and smaller tidal volume)*.

BLS Personnel: Allow patient to administer their own respiratory medications as prescribed by their physician, see **Field Policy: BLS Medication Administration**.

**CPAP** - start with valve at 7.5 cmH2O setting and 100% O2 flow rate. Titrate to patient’s condition. If patient’s respiratory status does not improve, change valve setting to 10.0 cmH2O. Be prepared to support ventilations with appropriate airway adjuncts. Monitor and record vital signs every 5 minutes. Be prepared for possible hypotension. If hypotension develops, decrease valve setting.

**PROTOCOL PROCEDURE:** Flow of protocol presumes that condition is continuing. If the patient is in distress, immediate rapid transport is preferred with treatment performed en route.

**ACCREDITED EMT**

EMT’s may carry an Auto injector on emergency apparatus **ONLY** if they are on duty and working for a provider agency that has been approved by the local EMS Agency (LEMSA) Medical Director.

IF PATIENT IS IN EXTREMIS (LOW SP02, INABILITY TO SPEAK, AND/OR ALOC):

FOR ASTHMA PATIENTS: Administer EPI-PEN AUTOINJECTOR- 0.3 mg IM. (Repeat dose may be given in 10 minutes if ALS response is delayed and patient is not responding to treatment).

**ALS TREATMENT**

Start with DUONEB (2.5 Mg Albuterol and 0.5 Mg Atrovent in normal saline). Do not repeat.

If severe symptoms persist, initiate continuous ALBUTEROL 2.5 mg in 3 mL normal saline (Max. 15 mg/hr). Breathing treatments may be given concurrently with CPAP.

NORMAL SALINE – establish an IV/saline lock.

FOR PATIENTS IN EXTREMIS (LOW SP02, INABILITY TO SPEAK, ALOC): administer EPINEPHRINE 1:1,000 - 0.3 mg IM. (Repeat doses may be given in 10 minute intervals).

FOR STRIDOR (Moderate to severe croup/airway burns/laryngeal edema/anaphylaxis): administer NEBULIZED EPINEPHRINE 1:1,000 – 5 mL (5 mg) via nebulizer given over 10 minutes. (MR q 10 minutes).

CONTACT BASE STATION

Note: If “base line” vital signs have increased 20%, visible tremors, or increased arrhythmias/palpitations occur discontinue treatment and contact base station.
### PEDIATRIC

#### BLS TREATMENT

**ABCs / ROUTINE MEDICAL CARE** – place patient in position of comfort. Be prepared to support ventilation with appropriate airway adjuncts.

If indicated, administer high flow oxygen via non re-breather mask OR may attempt high flow humidified oxygen via nasal cannula to maintain >94% SpO2.

If patient is in severe distress, attempt to assist breathing with BVM after explaining procedure to patient. *(For patients with severe asthma use a slower ventilation rate (6-8 VPM) and smaller tidal volume).*

**BLS Personnel:** Allow patient to administer their own respiratory medications as prescribed by their physician, see Field Policy: BLS Medication Administration.

**PROTOCOL PROCEDURE:** Flow of protocol presumes that condition is continuing. If patient is in distress, immediate, rapid transport is preferred with treatment performed en route.

#### ACCREDITED EMT

EMT’s may carry an Auto injector on emergency apparatus **ONLY** if they are on duty and working for a provider agency that has been approved by the local EMS Agency (LEMSA) Medical Director.

**FOR ASTHMA PATIENTS IN EXTREMIS (LOW SPO2, INABILITY TO SPEAK, AND/OR ALOC):**

**EpiPen JR** *(Only for pediatric patients weighing 15-30 kg (33-66 lbs): 0.15 mg (0.3 mL, 1:2,000) IM (lateral thigh is preferred). May repeat in 10 minutes if ALS response is delayed and patient condition warrants.)*

#### ALS TREATMENT

**NEBULIZED BREATHING TREATMENTS:**

Start with **DUONEB** *(2.5 Mg Albuterol and 0.5 Mg Atrovent in normal saline). Do not repeat.*

If severe symptoms persist, initiate continuous **ALBUTEROL** 2.5 mg in 3 mL normal saline *(Max. 15 mg/hr).*

**NORMAL SALINE** – establish an IV/saline lock.

**FOR PATIENTS IN EXTREMIS (LOW SPO2, INABILITY TO SPEAK, OR ALOC):** administer **EPINEPHRINE 1:1,000** - 0.01 mg/kg IM. *(Repeat dose may be given in 10 minutes).*

**FOR STRIDOR (Moderate to severe croup/airway burns/laryngeal edema/anaphylaxis):** administer **NEBULIZED EPINEPHRINE 1:1,000** – 0.5 mL/kg *(Up to Max. single dose of 5 mL (5 mg)) via nebulizer over 10 minutes. Dilute with NS to 5mL for patients 10 kgs or <. *(MR q 10 minutes).*

**CONTACT BASE STATION**

**Note:** If “base line” vital signs have increased 20%, visible tremors, or increased arrhythmias/palpitations occur, discontinue treatment and contact base station.

Reference: Routine Medical Care, BLS Medication Administration, Optional Skills, CPAP, Asthma, EpiPen & EpiPen Jr. Auto Injector, Albuterol, Atrovent, Epinephrine