



A DIVISION OF
HEALTH CARE SERVICES
AGENCY

San Joaquin County

Emergency Medical Services Agency



<http://www.sjgov.org/ems>

Mailing Address
PO Box 220
French Camp, CA 95231

Health Care Services Complex
Benton Hall
500 W. Hospital Rd.
French Camp, CA 95231

Phone Number
(209) 468-6818

Fax Number
(209) 468-6725

EMS Policy Memorandum No. 2018-05

Revised

DATE: October 23, 2018

TO: Prehospital Personnel
Prehospital Service Providers
Emergency Departments

FROM: Katherine Shafer, MD, EMS Medical Director

SUBJ.: Treatment of Croup with Stridor

The purpose of this memorandum is to provide ALS personnel with additional treatment options by approving the use of nebulized 1:1000 epinephrine or 2.25% racemic epinephrine to EMS Policy No. 5819 Pediatric Respiratory Distress: Stridor. With the season fast approaching in which we see an increase in the treatment of respiratory illness the medical director has approved the use of nebulized 1:1000 epinephrine or 2.25% racemic epinephrine for the treatment of **Croup with stridor** for children older than twelve (12) months-old and younger than 13 years-old as outlined below.

Background

Croup refers to an infection of the upper airway, which obstructs breathing and causes a characteristic barking cough.

Croup **without** stridor- Is characterized by a brassy or “barking” cough and hoarseness. The focus of treatment should be on keeping the patient calm.

Croup **with** stridor- Stridor is a harsh, crowing, or vibratory sound of variable pitch that results from turbulent airflow caused by partial obstruction of the respiratory passages. Audible without a stethoscope, stridor always warrants immediate attention because it may be the first sign of a serious or life-threatening process

Indications: Stridor, history of recent illness, increased work of breathing, SpO₂ <94%, poor skin signs (diaphoresis, cyanosis, etc.), or other signs of hypoxia, and greater than twelve (12) month of age.

Contraindications: Less than twelve (12) months of age, no history of recent illness, hypersensitivity to epinephrine, cardiac arrhythmias,

Side Effects: restlessness, tremor, tachycardia, ECG changes, over dosage can result in increased blood pressure with subsequent pulmonary edema, tachycardia, kidney failure, metabolic acidosis, and cold, white skin.

1:1,000 Epinephrine

Dose: 2.5 mg 1:1,000, epinephrine, via nebulizer, with no repeat dose

Racemic Epinephrine

Dose: 0.5ml, 2.25%, Racemic Epinephrine, in 4 ml normal saline, via nebulizer, with no repeat

Documentation requirements: Blood pressure, heart rate, respiratory rate, SpO2, and ECG, every 3 min. Lung sounds before and after treatment.

Please direct any questions you may have regarding this memorandum to, Matthew R. Esposito, Prehospital Care Coordinator, email: mesposito@sigov.org.