CENTRAL CALIFORNIA
EMERGENCY MEDICAL SERVICES
A Division of the Fresno County Department of Public Health

Manual	Policy
Emergency Medical Services Administrative Policies and Procedures	Number 530.21
Subject Paramedic Treatment Protocols **SHOCK (NON-TRAUMATIC)**	Page 1 of 2
References Title 22, Division 9, Chapter 4 of the California Code of Regulations	Effective Fresno County: 01/15/82 Kings County: 04/10/89 Madera County: 06/15/85 Tulare County: 04/19/05

STANDING ORDERS	
1. Assessment	ABCs
2. Airway	Protect with position, basic airway maneuvers, pharyngeal airway, advanced airway if indicated, assist respirations as needed, suction as needed.
3. Oxygen	High flow. Refer to EMS Policy #530.02.
4. Monitor	Treat rhythm if appropriate.
5. Transport	Minimize delay on scene. Therapy enroute, reassess vital signs enroute.
6. IV Access	LR – Standard Tubing - one or two IVs. *If no signs of pulmonary edema:* Run wide open if BP less than 80. Fluid challenge if BP is between 80-100. Refer to EMS Policy #530.02.
7. 12-Lead ECG	Refer to EMS Policy #530.02 and #547 in presumed cardiogenic shock.
8. Contact Hospital	Per EMS Policy #530.02.

BASE HOSPITAL ORDERS	
*1. Epinephrine Drip	If profound shock persists. 1:10,000 1 mg in 250 ml normal saline, titrate IV with pediatric drip to blood pressure of about 100 systolic. (Rate of 0.5-1.5 ml/min.)

SPECIAL CONSIDERATION AND PRIORITIES

1. Assessment – Airway, lung sounds, neck vein distension, edema, chest pain, time of onset. Bleeding source? Trauma?

2. Patients in shock of unclear etiology require diagnostic and treatment modalities not available in the field. Minimize delay at the scene.

Approved By		Revision
EMS Division Manager	**Daniel J. Lynch** (Signature on File at EMS Agency)	**05/01/2014**
EMS Medical Director	**Jim Andrews, M.D.** (Signature on File at EMS Agency)	

3. Transport lights/siren.

4. Signs of shock are decreased mental status, cool moist skin, tachycardia, and possibly low BP. Classification of shock may be assisted by history and physical exam:

   A. Wet Lung Sounds

      1. Cardiac history, cardiac medication (digoxin, furosemide, nitroglycerin).

         - Consider pulmonary edema (CHF) with cardiogenic shock.

   B. Dry Lungs and Neck Vein Distension

      1. Females on birth control pills; history of thrombophlebitis; postpartum period; bedridden or immobilized patient:

         - Consider pulmonary embolism (may not have neck vein distension).

      2. Muffled heart tones, trauma, MI within the past two weeks.

         - Consider pericardial tamponade – treat with fluid resuscitation.

      3. Absent breath sounds on one side, hyperresonance on the same side, trachea deviated to other side:

         - Consider tension pneumothorax.

      4. A patient who is grunting and bearing down may falsely distend neck veins even in the setting of hypovolemia.

   C. Dry Lungs and Flat Neck Veins:

      1. Vomiting, diarrhea, fever, GI bleeding, fluid deprivation, trauma:

         - Consider hypovolemia.

      2. Appears vasodilated: warm skin, no pallor, may have flushed skin:

         - Consider septic shock if fever, recent infectious illness.

         - Consider anaphylactic shock if wheezes, hives, profuse redness to skin, exposure to allergen.

         - Consider toxic exposure.