CONTRA COSTA COUNTY EMERGENCY MEDICAL SERVICES AGENCY

EMS Best Practices

JANUARY 2013

2013 UPDATES & OTHER IMPORTANT TIDBITS!

TIME TO REVIEW CHANGES TO THE PREHOSPITAL TREATMENT GUIDELINES ONE LAST TIME. THEY GO INTO ACTION JANUARY 15TH.

Saving Lives Everyday!

CONTRA COSTA HEALTH SERVICES

Major changes to prehospital treatment guidelines and patient care procedures for 2013:

- **Nitroglycerin**—Because of complications seen with STEMI patients, the guideline now requires a 12-lead ECG to be done prior to NTG administration. If no STEMI is seen on 12-lead, NTG may be given. If STEMI is noted, no NTG is to be given. Pain management can be done with morphine, with special caution for patients with inferior wall STEMI. Also, two new names added to list of erectile dysfunction drugs–Staxyn and Stendra–no NTG if these medications have been used within 24 hours.
- **Dopamine**—Has been removed from the field treatment guidelines. This infrequently used drug was used 30 times in 7 years, and generally given for just a very short time before hospital arrival.
- **Think fluids**—In the patient with an inferior wall MI (500 cc) and in the patient with a symptomatic bradycardia (250–500 cc) fluid boluses should be given if there is no evidence of fluid overload or pulmonary edema. Fluid administration is also emphasized with the patient in shock (not cardiogenic) and for those who are volume depleted. When a patient in cardiac arrest has return of circulation that remains hypotensive, a fluid bolus is also indicated.
- **D10**—Will replace D50 and will be the preferred IV treatment for hypoglycemia in all patients. D50 will remain on the rigs as a backup if second treatment is needed.
- **Transporting the hypoglycemic patient**—High-risk patients who should be transported after hypoglycemia treatment include non-diabetics, elderly patients and patients on oral diabetes drugs only (not on insulin).
- **Sepsis Screening**—Early detection and intervention can decrease the mortality of patients with sepsis–in the context of suspected infection a sepsis screen should be done and reported to the hospital if screen is positive.
- **Oxygen Therapy**—Treatment guidelines have been modified for a more standardized approach.

- **Pediatric Medication Accuracy**—Pediatric medication errors are down! Keep up the good work. Use your Broselow every time you choose a medication for children under 4 feet 10 inches. Please document the color in your PCR.
- **People often stop CPR to answer the door**—If there is no one doing CPR when you arrive on scene, please ask if they were doing CPR; if they were, was it compressions only or compressions and breathing. Document your findings. This information is helpful for our ability to assess community CPR rates.

FROM ALL OF US AT EMS, HAVE A HAPPY AND HEALTHY NEW YEAR!

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ASK EMS

Do you have questions for EMS? Not quite sure who to ask? This column will help address those questions. As space permits, we will answer questions you submit. *As always, for immediate response please contact EMS.*

Q: Why is my PCR documentation important to the Cardiac Arrest Registry to Enhance Survival (CARES)?

A: The CARES program collects information on many different criteria related to a cardiac arrest. The information is compiled on a regional, state and national level by Emory University and the Centers for Disease Control (CDC). It allows us to identify strengths or weaknesses in our care of cardiac arrest patients. We are able to compare our outcomes on a national level and see what a great job we do. We also use the information to tell us what may be needed in future training. The information on the PCR is critical for needed CARES data, *(i.e. First arrest rhythm who initiated CPR, Witnessed or not, AED, Defibrillation, Intubation and ROSC).* We appreciate your complete documentation. It allows us to show what a great job we do every day.

Please send questions for future ASK EMS columns to:
EMS Pre-Hospital Care Coordinator Laura O'Neal @ laura.oneal@hsd.cccounty.us

CAB IN CARDIAC ARREST

—By Joe Barger, MD and Pam Dodson, RN

Have We Really Embraced the New Approach?

The 2010 American Heart Association Guidelines changed the recommended approach to CPR in a profound way: emphasizing circulation over airway and breathing, as well as CAB instead of the traditional ABC approach.

For EMS, that meant revising our practice so that uninterrupted CPR and early shock were the highest priorities since they are the keys to enhanced survival. We are deemphasizing airway management that might interrupt or decrease effectiveness of chest compressions early in the course of care, particularly using advanced airways.

Recently we looked at our April to September 2012 Contra Costa cardiac arrest data to see how we're doing in this regard. In 59 cases in which the initial rhythm was ventricular fibrillation and EMS provided the shock, time from arrival on scene to shock was 5 minutes or more after scene arrival in 35% of cases. When an advanced airway was attempted *(which happened in 2/3 of cases)*, 20% had that attempt within 5 minutes after arrival of EMS responders.

While documentation of the timing of events is not always precise, this data suggests there's room for improvement in our CAB approach. We continue to see cases in which basic airway maneuvers are given priority over defibrillation, even occasionally seeing advanced airways, IO access, and medication administration before shocks. Ideally, a shock can be administered within 60 seconds of arrival at the patient in most cases.

Both basic and advanced airway management can interfere at times with CPR and early shock, and it is reasonable to complete 2-3 rounds of CPR before considering the option of an advanced airway.

If BLS maneuvers are effectively moving the chest wall and the airway is clear, it is reasonable to continue with that method as well ■

FREEDOM HOUSE

—By Mia Fairbanks, RN

On September 13, 2012, Pam Dodson and I saw the *"Freedom House: Street Saviors"* documentary at the Roxie Theater in San Francisco.
Freedom House Ambulance Service began in 1967 as an anti-poverty program designed to provide training and employment to a group of predominately African-Americans who, at that time, society considered largely unemployable. Dr. Peter Safar, a leader in resuscitation research at Presbyterian-University of Pittsburgh Medical Center, began a training program to provide ambulance service to underserved areas of Pittsburgh; it was the first Paramedic Training program in the nation. The film portrays the history of the first paramedics in the U.S.; describing personal challenges these inaugural paramedics faced, their strong desire of to be a part of something and portraying social issues of the time. As a paramedic in Allegheny County, I *"grew up"* hearing about the Freedom House medics. Today most people in EMS have never heard of the vital role these men and women, played shaping EMS as we know it today. This film preserves the history of EMS ■