CPAP for BLS
BLS providers in Connecticut may now apply continuous positive airway pressure (CPAP) to patients in severe respiratory distress while awaiting the arrival of paramedics or when paramedics are not available. The change in scope of practice was approved by the EMS Advisory Committee and the Commissioner of Public Health.

Canton Ambulance and East Windsor will be among the first services in the state to have their BLS providers utilizing CPAP. Providers must first complete the state approved training program. Treatment must be in compliance with sponsor hospital guidelines.

This applies only to ambulances services that have the approval of their EMS medical director.

Indications for CPAP
Severe Respiratory Distress
- Accessory muscle use
- Hypoxemia despite oxygen therapy
- Marked work of breathing
- Inability to speak in full sentences

Contraindications
- Respiratory rate <10 breaths/minute
- Systolic Blood Pressure < 100 mmHg
- Confusion: inability to understand and cooperate with application of CPAP
- History of pneumothorax or recent tracheobronchial surgery
- Active nausea or vomiting (despite anti-emetic therapy if available)

How CPAP Works
CPAP puts more air into the lungs. It delivers a predetermined high level of pressure. Pressure pushes the oxygen to distal airway structures. By preventing atelectasis (collapse of alveoli) more alveoli are available for gas exchange. CPAP overcomes constricted airway resistances and increases airflow. In patients with CHF, fluid in the alveoli inhibits gas exchange. CPAP moves fluid back into vasculature decreasing fluid overload and work of breathing. The pneumatic splint of CPAP prevents the patient from having to exert energy themselves to breathe.

UCONN Fire Department Experience
UCONN Fire Department paramedics used CPAP 23 times over a one year period. There were 21 documented positive results. One patient did not improve with CPAP and required intubation. One patient had CPAP applied shortly before arriving at the hospital so no change in condition was noted in the prehospital run form. Only one adverse side effect was documented. One patient became hypotensive which improved with lowering CPAP pressure from 10 to 7.5.
Cardiac Arrest Save!
American Medical Response paramedic James Bergen and his partner Steven Teiger, along with responders from the Avon Police Department found a 69-year old female collapsed in her kitchen. They initiated CPR, and finding the woman in ventricular fibrillation defibrillated her. Several minutes later, they had restored pulses and a blood pressure. Paramedics John Pickert and Eric Colantonio from the UCONN Fire Department arrived to assist. They sedated and intubated the patient and transported her to John Dempsey Hospital, where she went to the cardiac cath lab and also underwent induced hypothermic therapy to preserve brain function. We are happy to report thanks to the great efforts of our EMS system and the care she received at John Dempsey Hospital, she made a full neurological recovery and was discharged. Great work team!

STEMI Kudos—Early Notification
Great work by UCONN Fire Department paramedics Michael Alger, John Martinez, Joe Speich, American Medical Response paramedic Steve Decauwpua, and Bristol EMS paramedic Betsy Austin for their early identification and notification of STEMI patients last month. The medics provided lead times of 20, 14 and 10 minutes, enabling John Dempsey Hospital to preactive the cardiac cath lab prior to the patients’ arrivals. Door-to-balloon times were 33, 40 and 45 minutes — all on weekends. The patients all had excellent outcomes, and are home with their families with heart functions largely preserved thanks to the great job by our area paramedics. Early Notification Saves Lives!

UCONN Health Center EMS Web Site
For news, educational information, CME schedule and past copies of our newsletter Partners, check out our web site at: uconnems.uchc.edu

December PM EMS CME
Respiratory Emergencies
CPAP For All Levels of Provider:
Richard Kamin, M.D.

Research Review:
Latest EMS Research – Prehospital Induced Hypothermia, Epinephrine Dosing Intervals in Cardiac Arrest, Pediatric Anaphylaxis
Peter Canning Paramedic, R.N.

December 11, 2013 (Wednesday)
7:00 P.M.
Keller Auditorium

Pizza and soft drinks at 6:45 P.M.
All EMS Responders and general public are welcome!

Park at top of hill.
Enter main door, take escalator down one floor.

3 Hours CME
For Questions email Peter Canning at canning@uchc.edu
ALL EMS RESPONDERS AND GENERAL PUBLIC WELCOME

December AM EMS CME
Respiratory Emergencies:
CPAP For All Levels of Provider
Richard Kamin, M.D.

Case Reviews:
Richard Kamin, M.D.

Journal Review:
Effect of Prehospital Induction of Mild Hypothermia on Survival and Neurological Status Among Adults With Cardiac Arrest: A Randomized Clinical Trial. JAMA. 2013 Nov 17
Peter Canning Paramedic, R.N.

December 18, 2013 (Wednesday)
8:30 A.M. – 11:30 A.M.
East Farms Fire Department
94 South Road, Farmington, CT

CONTACT US:
Any questions or suggestions about EMS? Looking for patient follow-up?
Contact EMS Coordinator Peter Canning at canning@uchc.edu or call (860) 679-3485.