



EMS NEWS

January - March, 2009

Volume 25, Issue 1

The State of our System - 2009

By Michael King, EMS Director

In the wake of the County's housing crisis with a declining tax base, frozen markets and an unproven federal bailout plan, EMS must prepare for a challenging year that may alter how we and the County conduct business. The economic issues facing the County might take five years to resolve. This crisis will require fiscal austerity and in some cases, reductions in public health services. EMS cannot afford to curtail or diminish program services, residents and visitors will continue to get sick, and we must be prepared to meet the upcoming challenges.

This New Year message briefly outlines some of the goals, objectives and opportunities on the horizon for 2009 and beyond.

EMS will entertain bids for ambulance services and dispatch:

- Request for proposal (RFP) for the provision of ambulance services for the 911 system. We expect this document to be issued in March.
- EMS is seeking to reengineer how the County's 911 emergency medical services are dispatched. We are releasing a request for information (RFI) to dispatch ambulances through one or both of the county's fire department operated centers. This document asks dispatch agencies to provide information prior to the issuance of the ambulance services RFP.
- We will also extend the First Responder Advanced Life Support (FRALS) contracts for 18 months. This will allow us to coordinate the providers of these contracts with the winning ambulance provider's proposal.

Programs

CPR7 - Our new CPR7 program will begin in earnest. Partnering with our schools and the American Heart Association, the program will implement CPR training

for 20,000 + County seventh graders.

AEDs - We will develop a program to place 200 + automated external defibrillators in public buildings throughout the County.

EMS will work with several public health and safety programs designed for at-risk youth:

- We will coordinate with Wellington Jackson to conduct the Bay EMT program from our office in San Leandro.
- Bob Young will continue as the lead instructor in the Camp Sweeney Emergency Medical Responder Program (see page 2 for more information on this program). This successful endeavor prepares incarcerated individuals with the skills and motivation to pursue a career in EMS.
- We hope to expand the "Caught in the Crossfire" program to several other Alameda County hospitals, allowing even more youth to participate. This innovative program started at the Alameda County Medical Center and matches youth involved in violence with reformed gang members.

EMS continues its participation, under Dr. Jocelyn Freeman-Garrick's guidance, in the successful operation of the Sobering Center.

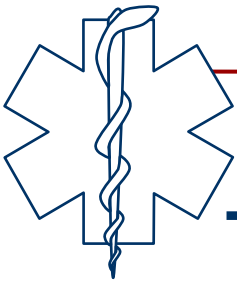
New Directions

With these dire economic times, EMS has an opportunity to re-engineer existing programs and develop new and innovative business strategies to EMS service delivery models. These new strategies will generate

(Continued on page 2)

Inside this issue:

Camp Sweeney Graduates	2
Disaster Volunteers	2
From the Medical Director	3
Traffic Facts from NHTSA	3
SCA Survivor Survey	4
EMS Week 2009	4
News & Announcements	4



At-Risk Youth Complete Emergency Medical Course

By Robert Young, PHCC, EMT-P

The Alameda County Department of Public Health/EMS Agency in cooperation with the Alameda County Probation Department spearheaded a unique diversion training program for “at risk” youth assigned to the county’s Camp Sweeney juvenile justice detention facility.

Students at Camp Sweeney completed a 40 plus hour course of instruction in Emergency Medical Responder Technologies as set forth by standards of the U.S. Department of Transportation’s First Responder National Standard Curriculum and the American Heart Association (AHA) guidelines, including training in automated external defibrillation (AED). The students also acquired structured life skills training with adult mentors.

This program was designed to provide volunteer Camp Sweeney students a diversion program and provide them with team building and life skills. The ultimate goal for this select group of students would be to transition to higher levels of

training and education within the healthcare industry.

What’s the future for these students . . . who knows? The students were encouraged to continue their studies and were told they would be accepted into the “Bay EMT Program” sponsored by the Oakland Fire Department and Alameda County Fire Department. Cooperation with the county’s juvenile justice system perhaps would make it possible for select students to seal their past criminal records and make them employable in the future.

As a lifelong EMS educator for over 25 years, it has been my privilege to be a part of these student’s education and lives. They have shown a true interest in the subject matter and more importantly a sense of empathy towards their community and each other. Education is the light that ends despair and social inequality, and these student’s efforts have given them a foundation for future personal development.

EMS Director (Continued from page 1)

revenue while providing cost effective approaches to existing services. Several models and program enhancements are being considered for implementation during this fiscal year:

- An e-commerce program will provide ease of payment for certifications and accreditations, purchase of the EMS policy manuals and other goods that are requested by our constituents.
- EMS Consulting Services are already in demand and yet we continue to be unable to provide our services. We will develop a model that will be feasible to contract for professional expertise and bill for our services. This model will require “buy in” from the Public Health Department Health Services Agency and County officials.
- A program of EMS Billing Services for Transport Fire Departments is in its infancy. This program would develop a joint venture with a small local emerging business (SLEB) or other service to provide a higher rate of return by collecting automated billing information and linking to MediCal enrollment.

The EMS staff is consistently challenging itself by asking: “Are we doing all that we can to be excellent and innovative? What can we put in place to have a financial cushion while the economic crisis gets resolved?”

EMS has little to no influence on the critical issues facing the County and State; however, we must adapt, adjust and become innovative while operating within the status quo. This

may mean teaming up with other agencies that are willing to seek alternative revenue to replace declining dollars.

We look forward to a tough year - with extreme challenges, which we must take advantage of by creating interesting and potentially rewarding opportunities. To make that happen, we look forward to partnering with our service providers and County divisions, moving forward to provide the best care for our patients.

Roll-up Your Sleeves & Volunteer

Public Health and EMS have recently acquired two disaster trailers. The trailers each contain two 28-foot tents that are portable, fully outfitted, and self-supporting to house and care for 11 patients for up to 90 days in the event of a disaster. One trailer will be housed in the south county and the other in the north county. It is anticipated that the trailers will be staffed by members of the Alameda County Medical Reserve Corp or through the California State Healthcare Volunteer Registry.

California EMSA is recruiting healthcare workers for the state’s registry, who want to voluntarily practice their profession during an emergency or disaster. The secure web-based registry allows you to indicate your volunteer preferences and enter information about your skills.

To register, visit: healthcarevolunteers.ca.gov

California Healthcare Volunteers is managed by the California Emergency Medical Services Authority in partnership with the California Department of Public Health and Services Agency.

From the Medical Director



The Use of Hypothermia in EMS

By Dr. James E. Pointer, MD, Medical Director

Some of you may have read The New York Times article (Dec 3, 2008) about the institution of induced hypothermia by the New York City Fire Department. New York City joins several other cities including Seattle, Boston, Miami, Vienna, and London in using this modality to improve survival rates and rates of neurologic function in cardiac arrest patients. Induced hypothermia has been around since the 1950s. Researchers at that time believed that hypothermia's benefit was due to a reduction in requirements for oxygen. Later, this proved to be incorrect; probably, hypothermia provides its benefit by blocking several harmful biochemical reactions. These reactions which include calcium shifts, lipid peroxidation, and other mechanisms, well known only to biochemists, apparently kill neurons in vulnerable regions of the brain.

Two studies in the February 21, 2002 issue of *New England Journal of Medicine*, one from Australia and the other from Europe, showed the neurologic benefit of mild therapeutic hypothermia in survival in out-of-hospital cardiac arrest. In the Australian study, 49% of post arrest patients that were treated with hypothermia were discharged home as compared with 26% in the normothermic group. The European study showed similar results. Fifty-five percent of patients in the hypothermia group had a favorable neurological outcome as compared to 39% in the normothermic group. Why is it been so long for the health care system to begin using hypothermia again? Probably, articles in the press, publicity within the medical community surrounding the "new CPR", and several new medical devices have renewed interest in therapeutic hypothermia.

Hypothermia must be induced quickly, at a specific temperature, and in a specific group of patients. It does little good to begin hypothermia in an ambulance if this treatment is not continued in the hospital. Most of the existing data on hypothermia are for cardiac arrest patients who are resuscitated from ventricular fibrillation, have return of spontaneous circulation (ROSC), but are unconscious. In this group, results are best if hypothermia (33° to 36° centigrade) is begun within six hours and continued for 12 to 24 hours. There are no really quick and elegant methods of inducing hypothermia in EMS. Cold packs in the axilla, groin, and around the neck have been most frequently employed. The standard regimen for intravenous fluids is Ringers Lactate at 4° C, 30 cc per kilogram administered over several hours. Alameda County EMS has been experimenting with a relatively

new technology: a microfiber cooling cloth (from 32 Degrees, Inc., Bangor Maine). This cloth, about which there is very little scientific evidence, when moistened with water, cools and retains a cool temperature for long periods of time as compared to "standard" fabrics. In the hospital, much more elegant methods of inducing hypothermia exist: water and air circulating cooling systems consisting of one or more blankets, gel coated external cooling devices, and intravascular cooling systems using a single lumen central venous catheter.

Alameda County EMS will soon work with one or more of our providers in utilizing hypothermia with a group of our cardiac arrest patients. We hope that through extensive training in CPR, the use of the *Res-Q-POD*, and community training programs like *CPR7* we can incorporate induced hypothermia in to our extensive armamentarium that is available to our patients and citizens in improving survival from cardiac arrest. Please contact me at james.pointer@acgov.org for further information or for copies of the articles cited.

Editor's Note: *In the next edition Mike Jacobs will present information on how this topic may affect paramedics in Alameda County. "Cool man . . . So Cool!"*

CPR7 is an exciting Alameda County EMS program that partners with schools in Alameda County and the American Heart Association to train 20,000 7th graders in CPR. The students teach their family and friends by using the innovative CPR Anytime™ kit, a 22-minute video and an inflatable manikin.

Traffic Facts: The National Highway Traffic Safety Administration reported traffic facts for 2007. In California:

- 52 lives saved by child restraints, age 4 and younger
- 1,791 lives saved by seat belts, age 5 and older
- 211 lives saved by front air bags, age 13 and older
- 266 lives saved by motorcycle helmets



If there had been 100% compliance with restraints and helmets, the estimate of additional lives that would have been saved was 196 by seat belts and 26 for motorcycles.

Source: *Lives Saved in 2007 by Restraint Use and Minimum Drinking Age Laws, November 2008, NHTSA. Link:*

nhtsa.gov/staticfiles/DOT/NHTSA/NCSA/Content/RNotes/2008/811049r.pdf

ALAMEDA COUNTY

Board of Supervisors

Scott Haggerty	District 1
Gail Steele	District 2
Alice Lai-Bitker	District 3
Nate Miley	District 4
Keith Carson	District 5

Health Care Services Agency

David J. Kears
Director

Public Health Department

Anthony I ton, MD, JD, MPH
Director/Health Officer

EMERGENCY MEDICAL SERVICES



A Division of the
Public Health Department

1000 San Leandro Blvd. #200
San Leandro, CA 94577
(510) 618-2050
(510) 618-2099 - fax

EMS Administration

Michael King
Director

Dale Fanning
Assistant Director

James E. Pointer, MD
Medical Director

Jocelyn Garrick, MD
Assistant Medical Director

Newsletter Production

John Vonhof Editor
Kris Daugherty Design/Layout

WHAT'S NEW ON THE WEB

Take a short survey to help us design the new EMS website! We want to know what you like about the current site and what could be improved



EMS WEBSITE:
acgov.org/ems

SCA SURVIVOR SURVEY & AEDS

The Sudden Cardiac Arrest Association (SCAA) recently conducted a nationwide survey of sudden cardiac arrest (SCA) survivors and their spouses/companions. More than 150 SCA survivors in the SCAA database responded. Dr. Benjamin Abella, Director of Clinical Research at the Center for Resuscitation Science, presented the preliminary analysis of the study at the SCA Survivor Summit held during the SCAA annual meeting in October. *Power Points*, the newsletter of the SCAA, reported some important findings of the study:

- Twenty-eight percent of SCA survivors experienced their event in the home. That compares to research that has shown that more than 70% of all sudden cardiac arrests occur in the home. This finding underscores the importance of public access to defibrillation and demonstrates that a sudden cardiac arrest victim is more likely to be revived if their event occurs in a public, witnessed setting where there are bystanders to call 9-1-1, start CPR, and get access to an AED.
- Only 12% of survivors had CPR performed by a paramedic or trained emergency responder. The vast majority received CPR from family members,

bystanders, or medical personnel who by chance were nearby when the victim collapsed – a clear validation of the importance of immediate bystander CPR.

- Nearly 53% of SCA survivors reported a change in their memory capabilities, far outpacing changes to the other senses of taste, hearing, sight, or touch.
- When asked what activity they feared resuming the most, “being alone” was the most common response, at 30%. Another 23% of respondents most feared returning to an exercise program.
- Sixteen percent reported that their SCA was triggered by a genetic condition such as Hypertrophic Cardiomyopathy, or Long QT, Brugada, or Wolf-Parkinson-White syndromes.

Dr. Abella stresses, “The more we learn about SCA survivors and their experiences, the more we can focus on our public education, emergency response, and post-resuscitation care efforts.”



Source:

Sudden Cardiac Arrest
Association, Fall 2008
Volume 2, Issue 4



EMS Week 2009 May 17 - 23

All Alameda County EMS Week information will be on our website this year - check it out!

NEWS & ANNOUNCEMENTS

EMS License Plate - The Emergency Medical Services Authority has developed a specialty license plate to honor and recognize EMS professionals in California. Creating a specialty plate will support and recognize healthcare professionals who work in the emergency setting and increase the visibility of EMS in California. For more information or to order yours go to: http://www.emsa.ca.gov/about/license_plate/default.asp



Meeting the EMS-C Challenge: Making a Difference in Pediatric Disaster Care - Wednesday, April 15, 2009, 10:00 am to 5:00 pm - 6 hours BRN and Prehospital CE available. For more information check the EMS website.

9th Annual Statewide Senior Injury Prevention Conference - The 2009 Senior Injury Prevention Conference will take place on May 28th at the Handlery Hotel in San Diego. Our partners this year include the California Emergency Nurses Association and the California Department of Public Health. Topics will include: medication safety, the role of foot health in successful aging, the latest advances in fall prevention programs and training, and driving safety programs. An emergency department assessment tools will be presented that would help identify fall risk factors in patients being discharged home. For more information contact Colleen Campbell at 510-577-3535. We will be inviting Southern California senior service organizations to participate in a poster session to help service providers identify potential partners and acquaint attendees with local programs.