

THE STATE OF OUR SYSTEM



A Division of the
Public Health
Department

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

Administration

Michael King
Director

Dale Fanning
Assistant Director

James E. Pointer, MD
Medical Director

Jocelyn Garrick, MD
Assistant Medical Director

Newsletter Production

John Vohnof
Editor

Kris Helander-Daugherty
Design & Layout

Inside This Edition:

Thinking outside the (algorithm) box	2
CPR Anytime™	2
EMS Week Awards	3
Hospital ED Pediatric	5
Improving CPR & AED	5
8th Annual Senior Injury Prevention	6
Fast or Easy IO?	6
Journal Club Returns	6
News and Announcements	6

By Michael King, EMS Director

In 2007 Alameda County Emergency Medical Services Agency engaged Fitch & Associates to conduct an assessment of our EMS system. Fitch is the industry leader in conducting and recommending system enhancements within the EMS industry. Interviews were conducted with staff of multiple providers: fire departments, hospital EDs, 9-1-1 dispatch centers, ambulance services, and other government stakeholders. The assessment examines how the system currently operates, notes its strengths and weaknesses, and makes recommendations for system enhancements.

The report on the initial findings has been released and can be downloaded from the EMS website. In addition, the report will be presented and addressed in several forums: the county Board of Supervisors, the Board's Health Committee, and two community forums. Check the website for the dates, times, and locations.

As the EMS Director, I am fortunate to oversee a system that I feel is the very best at innovation, research, and the introduction of new clinical tools and protocols. In spite of our positive accomplishments, I sense that we lack upgrades to our system. The system's foundation has not been appreciably enhanced since the introduction of First Responder Advanced Life Support (FRALS) program in 1999. The FRALS funding, however, does not extend to fire departments that transport patients in their re-

spective cities (Alameda, Berkeley, Albany, and Piedmont). The revenue collected by these cities pales in comparison to that of the private provider. EMS wishes to establish a process that will result in a more equitable distribution of funding.

American Medical Response (AMR), and its predecessor, Regional Ambulance, have been the sole provider for the majority of the county since 1990. The AMR contract will expire in October 2009. Fitch & Associates will assist EMS in developing a request for proposal process to solicit bids on the exclusive operating area currently serviced by AMR.

EMS will be introducing many new programs, services and enhancements in 2008, including several youth-based programs. These programs will provide employment opportunities to remove identified youth from risky life styles by using existing community-based organizations to assist with behavioral changes and to provide productive career choices. Some of the new and innovative programs include:

- **Caught In The Crossfire** - Assist youth in finding healthier life styles after being treated for trauma at ACMC.
- **Pipeline Project** - Provide health services training courses and education support for youth.
- **Camp Sweeney** - Offer EMT training programs for youth incarcerated in work programs.
- **EMT Readiness Course** - Preparing youth to successfully complete EMT-I training programs and to pass the National Registry exam.

- **Foster Care program** - EMS will work with Public Health and safety organizations to help individuals gain employment after being released from the foster care system.

Other EMS initiatives for 2008 include:

- **CPR Anytime** - Pilot project will move forward to county-wide implementation.
- **India EMT Training** - EMS will assist Unitek College to develop westernized EMT training in India.
- **Ambulance Ordinance** - Countywide non-911 ambulance service requirements will be implemented.
- **AED & CPR Training** - Roll-out of CPR training and AED placement at designated county and public building will begin.

WHERE ARE WE IN THE FITCH ASSESSMENT?

Phase 1

- ✓ System assessment by consultant
- ✓ Report delivered to EMS

Phase 2

- ✓ Review of report by EMS
- ✓ Stakeholder input process
- ✓ Development of RFP
- ✓ Release of RFP

Phase 3

- ✓ RFP process begins
- ✓ Training of selection committee
- ✓ The agency assists with contract development

Phase 4

- ✓ Board approval
- ✓ Contract negotiations
- ✓ Completion and signing of contract

Phase 5

- ✓ Implementation of contract
- ✓ Optional six month start-up time if contract awarded to a new company

THINKING OUTSIDE THE (ALGORITHM) BOX

By Nick Matley, NREMT-P, AMR

On November 17, 2007 while working unit 565, my partner Ben Lopez and I were dispatched to Davita Dialysis for an ALOC patient. We arrived to find a 53 year-old female who was alert but oriented to name only. Her dialysis treatment had not been started. Attendants could not auscultate a blood pressure and they noted only weak brachial pulses. Despite this, the patient's skin signs were good and her heart rate was 70-80 bpm. The monitor showed normal sinus rhythm with QRS <0.12 sec., obvious peaked T-waves in all leads, and no ST elevation.

The patient maintained her airway and saturated well with 15 LPM by NRB. A 500cc fluid bolus did little to change her pressure and dopamine was quickly considered; however, we were concerned over the risk of ad-

ministrating a potent vasoconstrictor in the same arm as the dialysis shunt.

Instead of transporting *load-and-go*, my partner Ben Lopez, chose instead to make base physician contact for the treatment of hyperkalemia. Base physician Charlotte Wills ordered Albuterol by NRB nebulizer and 50mEq of intravenous sodium bicarbonate. The patient quickly woke and became stable during transport with an excellent blood pressure, increased level of orientation and other positive signs of increased distal perfusion.

Although this is not a "code save" in the classic sense, the patient was on the verge of cardiac arrest, myocardial infarction and/or ventricular tachycardia. This is a perfect example of treating a patient within the paramedic scope of practice but outside of standing orders. I believe that if

"Can standing orders for treatment of hyperkalemia outside of "crush injury" be established?"

treatment for hyperkalemia had been delayed until after transport and ED triage, the outcome would not have been as positive.

Credit should be given to Paramedic Ben Lopez for taking the initiative, and Dr. Wills for trusting the prehospital providers' opinions and observations, for the success of this call. Can standing orders for treatment of hyperkalemia outside of "crush injury" be established?

From Dr. Pointer: *This is excellent patient care. I appreciate the thoughtfulness and concern that you, Ben and Dr. Wills showed. Making base contact for an out-of-protocol use of medications was the correct call in doing the right thing for this hyperkalemic patient.*



As you know, policies are revised once a year; we will include standing orders for albuterol, fluids, NaHCO₃, and perhaps, CaCl₂ in the dialysis center setting.

CPR ANYTIME™ PILOT UPDATE

The pilot is designed to measure the feasibility of using CPR Anytime™ kits to train Alameda County students in CPR. The 14 participating schools included public and private middle schools and high schools, and were selected to represent a cultural cross section of Alameda County.



In November 2007, Mike Jacobs and intern Rebecca Clark distributed over 300 CPR Anytime™ kits to the participating schools. Teachers trained students and then encouraged them to use their kits to train family and friends. Based on previous studies, it was anticipated that each student would train an additional 3-5 people. The preliminary results show that over 1300 persons received CPT training.

The feed-back from the schools has been very positive. Many of the participants were grateful that they were given the tools to learn the important and life-saving skill of CPR. Each student was allowed to keep their CPR Anytime™ kit to maintain his/her skills and to train even more family and friends even after completion of the pilot.

Alameda County EMS presented each school with a plaque recognizing their participation in this important study. We asked each student how many people they trained with their kit, as well as a few additional questions for each additional participant trained. Further analysis of the data will show whether CPR Anytime™ is a feasible tool for teaching CPR in our schools, as well as revealing interesting trends in the student's learning process. For more information on the CPR Anytime™ project contact Mike Jacobs (michael.jacobs@acgov.org) at 510.618.2047.

The 35th Annual National EMS Week is May 18-24.
This year's theme is:



EMS Week is sponsored by the American College of Emergency Physicians each year to recognize EMS personnel and to educate the public about EMS.

A luncheon will be held at the Marina Community Center in San Leandro where the EMS Agency will present awards to deserving individuals nominated by YOU!

NOMINATION CATEGORIES

***Star of Life Award:** recognizes an individual who represents the ideal EMT or Paramedic through exemplary medical skills, outstanding actions, and contributions to the advancement of excellence in the delivery of emergency care to the residents of Alameda County.

***Heart of EMS Award:** recognizes an individual, who by his/her actions has shown exceptional compassion for patients, has been an advocate for patients' rights, was involved in volunteer activities outside of work that enhance EMS, and/or was a role model for co-workers and others in the EMS community in Alameda County.

***Ben Mathews Lifetime Achievement/Innovation Award:** recognizes an individual or organization who by his/her actions and innovative thinking contributed to expanding the future of EMS in Alameda County, or an individual whose contributions to prehospital care have been consistent and long lasting, representing, in effect, a lifetime of outstanding service to the profession and the public.

***Rising Star:** recognizes an individual who is new to the field of prehospital care (< 3 years' experience) who has shown rapid improvement, exemplary skills, and/or has taken on added responsibility.

***Siren Award:** recognizes an individual, or a team of individuals from one or multiple agencies, who performed exceptional or heroic actions and/or exemplary team work in saving or attempting to save the life of another. The nominee(s) displayed significant and exceptional heroism and faced substantial risk of his/her own life in saving or attempting to save a life.

***Bear-Hug Award:** recognizes an individual or organization that has worked to reduce child and youth disability and death due to severe illness and injury, addressed the emergency medical needs of children when serious injuries or illnesses occur by working with children for better healthcare access, and/or has made a difference in the lives of children in Alameda County.

***Circle of Life Award:** recognizes an individual or organization that worked to reduce preventable injuries in the older population, raised awareness regarding the need for injury prevention programs for older adults, worked with seniors for better healthcare access, and/or made a difference in the lives of seniors in Alameda County.

***Civilian Hero Award:** recognizes a civilian who either:

1. Stepped forward to save another human in peril. This person, not trained in, active in, or affiliated with the provision of EMS or rescue service, has shown valor in an attempt (successful or unsuccessful) to rescue another. The incident must have taken place in Alameda County; however, the nominee need not be a resident of Alameda County. The

nominator need not have been involved in the incident; or,

2. Took on a cause relative to the provision of EMS services or a safety concern within the community that benefited the residents of Alameda County.

***Hospital Award for Excellence:** presented to a hospital facility, team, or staff member who participated or assisted in a pre-hospital care event, project or situation of exceptional nature; or made a significant contribution to EMS service by a one-time or continuing act of service in the public's interest.

***Peer Commendation:** presented to any EMS personnel receiving three or more nominations from members of the EMS, healthcare or first responder community that cites courteous or outstanding performance of duty.

Memorial Recognition

As part of EMS Week activities, EMS pays respect to individuals of the Alameda County EMS community who died during the past year. Please contact Kris Helander-Daugherty at 510.618.2032. To view last year's presentation, see the EMS website

AED Life-Saver

This award is presented for the performance of any public AED effort that resulted in saving a life. This recognition will be awarded to anyone involved in an AED save during 2007. Submit the entire team, and don't forget the individual that responded with the AED!
Contact John Vonhof at 510.618-2038

EMS WEEK 2008 MAY 18 - 24

EMS WEEK NOMINATION FORM

**Nominations must be received by
the Alameda County EMS Agency
by May 1, 2008.**

1000 San Leandro Blvd. #200
San Leandro, CA 94577
Attn: Michelle Voos



I wish to nominate _____
for the following EMS Recognition Award:

- | | |
|--|--|
| <input type="checkbox"/> Star Of Life Award | <input type="checkbox"/> Siren Award |
| <input type="checkbox"/> Heart Of EMS Award | <input type="checkbox"/> Ben Mathews Award |
| <input type="checkbox"/> Bear-Hug Award | <input type="checkbox"/> Citizen Hero Award |
| <input type="checkbox"/> Circle Of Life Award | <input type="checkbox"/> Rising Star Award |
| <input type="checkbox"/> Hospital Award for Excellence | <input type="checkbox"/> Peer Commendation Award |
| <input type="checkbox"/> AED Life-Saver - <i>specially designed AED pins will be awarded to the whole team</i> | |

Nominee Employer/Organization: _____

Nominee Contact Information:

work phone: () _____ home or cell phone: () _____ email: _____

EMT, EMT-P MD, RN, Other - Occupation if not EMS: _____

Nominated by: _____

Your phone: () _____ Your email: _____

Final selection or substitutions will be at the discretion of the award committee.

Please include a brief paragraph about your nominee and why he/she should be recognized.

Meeting the Challenge of Pediatric Emergency Care - Hospital ED Site Visits

Alameda County hospital emergency department (ED) staffs have the opportunity to improve emergency care for children. Using state and national guidelines, EMS has designed a unique site visit approach to engage our hospital ED staffs in an assessment and educational exercise.

The three-hour pediatric site visit, facilitated by the ALCO EMS Agency, is a voluntary collaborative educational assessment. The site survey team leader is Ronald Dieckmann MD, a leading pediatric emergency medicine expert, Professor of Emergency Medicine and Pediatrics, UCSF and Director of Pediatric Emergency Medicine, San Francisco General Hospital. Dr. Dieckmann visits the EDs with representatives from Children's Hospital Oakland and ALCO EMS. Hospital ED medical directors and nurse managers, pediatric clinicians, and administration representatives also attend the site visits.

In preparation for the site visit, each hospital is given a self assessment tool, which was adapted from the California EMS Authority's document "Pediatric Preparedness for Emergency Departments." This document is a nationally-accepted prototype for pediatric readiness in EDs. During the site visit, the team addresses the unique needs of each hospital, including ways to build feedback and access to experts. The project's goal is to facilitate open discussion and to identify critical pediatric issues and challenges of ED staff in caring for pediatric patients.

Alameda County EMS is committed to the ongoing improvement of care for our children through this collaborative process. If your facility is interested in participating, please contact Cynthia Frankel at cynthia.frankel@acgov.org or 510.618.2031.

Improving CPR and AED Numbers

ClubSport and Club-One health clubs, the Numi auto plant, U.C. Berkeley, a coffee shop, a corporate office, Lake Elizabeth, a community pool – these are some of the places in Alameda County where a citizen used an AED. In some, the patient died, but in an increasing number, others survived – thanks to citizens trained to do CPR and use an AED.

EMS has always supported the placement of AEDs within the community. Now, society is becoming increasingly aware that lives are saved with citizen CPR and AEDs. This trickle down effect has reached the average citizen, and many are willing to learn CPR and the use of an AED.

Benjamin S. Abella, M.D., M.Phil., clinical research director for the Center for Resuscitation Science at the University of Pennsylvania in Philadelphia, is the lead author of "Reducing Barriers for Implementation of Bystander-initiated Cardiopulmonary Resuscitation" (*Circulation Online*, January 14, 2008). Dr. Abella stresses public education about CPR, and the use of creative approaches to CPR education including initiatives such as the American Heart Association's Family and Friends CPR Anytime™. Another idea is to provide hospital-based training for family members of patients at risk for cardiac arrest.

There have been many discussions on the placement of AEDs. Some feel they should go where statistics show cardiac arrests happen. Others support placing them anywhere that is feasible.

Every city in Alameda County has multiple sites with AEDs. They include city offices, schools, churches, golf courses, senior centers, health and tennis clubs, banks, corporations, colleges, sports centers, parks, and the airport. The cities of Dublin, Newark and Union City have placed them in most major city facilities.

Some companies with large facilities place multiple AEDs at one address while others with different addresses use them at each location.

Senate Bill AB 1507 mandated that, effective July 1, 2007, AEDs are required in all health studios. In spite of a mailing to all identified studios, many have not notified EMS of their compliance. Follow-ups are planned with these health studios. The death of a 16 year-old boy at an Alameda health club, a month before the AEDs requirement went into effect, and recent deployments of AEDs at area health clubs, shows the importance of the availability of AEDs.

ClubSport in Pleasanton is a good example of a health club that actively supports CPR and AEDs. The 185,000 square foot facility has two strategically placed AEDs. All 300 employees are CPR trained while 41 managers, personal trainers, and fitness assistants have completed the full six hour CPR/AED training. All training is renewed annually. ClubSport averages 2600 member visits per day. Their commitment to CPR and AED training for member health and safety paid off in 2007 when there were three AED deployments; the third of which resulted in a "save." With such attention to staff training, including employee involvement in incident debriefing, ClubSport is a model for other businesses.

Alameda County EMS is working on a plan to place several hundred AEDs in the county. Some will be placed in county buildings and others in city or private locations, based on need, type of facility, and employee/public traffic. We anticipate that many hundreds of citizens will be trained.

If you are on a call in which a citizen used an AED, please make sure to document its use on your PCR, and if you have a moment, give the EMS office a call to report the event. Questions can be directed to John Vonhof at 510. 618.2038 (john.vonhof@acgov.org).

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 Iton, MD, JD, MPH, *Director/Health Officer*

WHAT'S NEW ON THE WEB

- Fitch Report
- Dates and locations for public forums
- EMS Week Activities



EMS WEBSITE: acgov.org/ems

NEWS & ANNOUNCEMENTS

Scarlet Ku joined EMS in December as a Program/Financial Specialist. She will be working on projects relating to budget and finance, as well as participating in program development and implementation. Prior to EMS, Scarlet worked for 28 years for the Oakland Police Department and the City Manager's Budget Office, and more recently in the BHCS Mental Health Contracts Unit. You can reach Scarlet (scarlet.ku@acgov.org) at 510.618.2055.

EMS Olympics in ALCO? Since 2008 is an Olympic year and most of us won't be traveling to Beijing, ALCO EMS would like to know if you are interested in putting together an EMS Olympics event to be held during EMS Week. EMS Olympics are a great way for professionals to practice their skills as well as for spectators to watch how others perform critical interventions and assessments. Some of you may have seen or participated in EMS Olympics like the JEMS Games that are held yearly at the EMS Today EXPO.

If you are interested in helping to organize this event or putting a team together, contact Joshua English (joshua.english@acgov.org) or 510.667.7533 by March 14, 2008.



Last years winners of the JEMS Games in San Diego

Fast or Easy IO ?

James E. Pointer, Alameda County's EMS Medical Director, and Alameda County Fire's EMS Manager Deede Vultaggio, RN, Assistant Chief Robert Schnepf, EMT-P, and EMS Director Alvin Kleveno, EMT-P collaborated on an article published by JEMS.com.



F.A.S.T-I™ Sternal IO

The article, "Fast or Easy? – Comparing Two Adult IO Infusion Devices," can be read at JEMS.com

by going to jems.com/news_and_articles/articles/Fast_or_Easy.html.

The article summarizes how Alameda County Fire Department paramedics performed a consecutive, prospective data analysis for the FAST-IO and EZ-IO devices in adult patients. The EZ-IO came out on top!



EZ-IO™

For more information on the study contact Dr. Pointer (james.pointer@acgov.org) at 510.618.2022.

8th Annual Statewide Senior Injury Prevention Conference

by Colleen Campbell, SIPP Coordinator

On May 15, 2008, the Alameda County Senior Injury Prevention Partnership (SIPP) will once again host the Annual Statewide Senior Injury Prevention Conference. This year the conference will take place at UC Davis Medical Center in Sacramento in partnership with UC Davis and the California Department of Public Health.

The Senior Injury Prevention conference has become an event that is recognized throughout the state as the annual forum for service providers to hear current research on injury topics, prevention techniques, model programs, and to network with other service providers. Previous conferences have included the launch of the California Stop Falls Network, introductions of the Archstone Fall Prevention grantee programs, interaction with experts from the American Society on Aging's DriveWell program and the California Poison Control Center.

The 2008 conference will include sessions on medication use and misuse, driving safety, beginning and advanced falls prevention, injury prevention program evaluation, changing the alcohol and medication environment, and more. It will also showcase innovative new templates for PowerPoint presentations to assist in fall prevention advocacy efforts across California. Continuing education will be offered to nurses and LVNs, and EMTs and paramedics. For more information on the conference go to: acgov.org/ems/ems_SIPP.htm or call Colleen Campbell at 510.577.3535.



The Bay Area Prehospital Journal Club is starting up again, February 21, 2008, 6:00 pm at La Pinata Restaurant, 39136 Paseo Padre Pkwy, Fremont. Prehospital and BRN C.E. available (3 hours - free!).

Papers being presented:

- Unrecognized misplacement of ET tubes
- ET intubation increases out-of-hospital time in trauma patients
- King airway use by air medical providers

Pre-registration is required - contact Pam Franklin at (510) 494-4200.