EMERGENCY MEDICAL DISPATCH

Summary
The 2002-2003 Sonoma County Civil Grand Jury investigated the contractor for the County that provides emergency medical services and its handling of Sonoma County’s new emergency response system, Redwood Empire Dispatch Communications (REDCOM). Dispatchers, firefighters, ambulance drivers, and the contractor’s management personnel and county management personnel were interviewed. The Jury was particularly interested in advice given to callers, directions given to response teams, time taken for response, and possible conflict of interest issues. The Jury was also concerned about dispatch personnel being able to adequately manage both medical emergency dispatch and fire dispatch when REDCOM went into operation.

Reason for Investigation
Two complaints were received by the Grand Jury in October 2002. The issues raised were that the AMR dispatchers received inadequate training, dispatched responders to the wrong addresses and gave incorrect medical advice to reporting parties. Other issues were that the contract company policies regarding ambulance dispatch left outlying areas in the county with inadequate ambulance service at critical times. Questions were raised regarding the use of flip-cards by the contract company dispatchers giving emergency medical advice, and the fact that dispatchers could not use “common sense” but were required to follow word for word what was written on the flip cards. Complaintants were also concerned that dispatchers would be overwhelmed when they took over fire dispatch in addition to medical emergencies under the REDCOM system.

Background
The contract company, the nation’s largest ambulance company, is overseen by Coastal Valley Emergency Medical Service Agency (EMS), a division of the Department of Health Services. This agency reports to the Board of Supervisors of each participating county: Mendocino, Napa, and Sonoma. In 1999 the contractor received a three year contract for $4.5 million to run the Sonoma County dispatch center. The contractor was to begin an updated dispatch service now called REDCOM in October 2002, but due to “technical difficulties”, start-up was postponed until Jan. 27, 2003. These services will now include fire dispatch and emergency medical dispatch.

Investigative Procedures
The Grand Jury
1. Interviewed:
   • Two complainants
   • The contract company’s Director of Communications
   • Regional Director of EMS
   • Director of Sonoma County Emergency Services
   • A former contract company employee
   • Sonoma County firefighters
   • Sonoma County paramedics
   • Contract company dispatchers
   • A Sonoma County Fire Marshall.
2. **Reviewed:**
   - EMS flip card- file (EMD NATIONAL ACADEMY PROTOCOL CARD FILE )
   - Various newspaper articles
   - *PRINCIPLES OF EMD*, third edition, (training manual for dispatchers )
   - Fire Caller Interrogation Protocol.

3. **Observed:**
   - The contract company center of operations, twice while in action, once in the old Sheriff’s building, and again after REDCOM was operative, in the new building.

**Findings:**

F1. Contract company dispatchers are required by EMS to use the flip-card system to give medical advice. It is used nationally and has been reviewed and approved by the Sonoma County Medical Officer who can modify it as desired.

F2. As stated in *PRINCIPLES OF EMD*, the U. S. National Institute of Health has found the use of the flip-card system to be superior to dispatchers using ad lib advice. Dispatchers are required to follow the card-file system exactly as written.

F3 Dispatchers are required to get two cross streets from a caller and must dispatch emergency vehicles within 60 seconds of receiving that call. They then return to the caller to obtain more information and give medical advice.

F4. Dispatchers work 12 hour shifts, experiencing periods of intense activity and periods of no activity.

F5. When a dispatcher receives a call from a conventional land-line home phone, a name and address relating to that phone is presented on the computer screen. This information does not appear when a cell phone is used. Cell phone 9-1-1 calls are directed to the nearest CHP dispatch center in Benicia.

F6. Ambulances are used for both emergency and non-emergency transfers. Under certain conditions this may cause a shortage of ambulances available for an emergency. Since non-emergency transfers are a good source of income, and since the contract company dispatches all ambulances, including those of other companies, a possibility for conflict of interest exists.

F7. Helicopters are often used for emergencies in inaccessible areas or when roads are blocked. Three primary agencies, Redwood Empire Air Care Helicopter (REACH), Cal Star from Mendocino County, Sonoma County Sheriffs Office Henry 1, and two secondary agencies, Life Lite from Sacramento and Life Lite from Walnut Creek provide this service. Inadequate communication between rescue helicopter dispatch and the contract company sometimes causes paramedics and ambulance drivers to wait longer for a helicopter than an overland trip would take.

F8. Ambulance and fire equipment are required by EMS and the county Contract Compliance Subcommittee to arrive on scene within seven minutes of the call in urban areas, within eleven minutes in semi-rural areas, within 14 minutes in rural areas, and within 29 minutes in remote areas such as mountain tops. These times can be extended if EMD determines the conditions are not critical.
F9. Dispatch personnel providing Emergency Medical Dispatch are certified by Dispatch Operation Advisory Group (DOAG), EMS officials, and the EMS AGENCY monthly, and ambulance drivers are certified bimonthly by the County Contract Compliance Subcommittee. The County Contract Compliance Subcommittee meets bimonthly to review the performance of the contract company, which includes looking at response time and citizen complaints.

F10. The Computer Assisted Dispatch system (CAD) is critically dependent on accurate and current information. The dispatch system is updated daily.

Conclusions
The Grand Jury determined that the new dispatch center is a great improvement over the old. The use of the flip-cards is a nationally accepted system. REDCOM continues to improve, but will be tested during the up-coming fire season. The dispatch center is adequately staffed. If emergencies create a staff shortage, dispatchers are held over until relieved. Supervisory personnel can fill in when necessary.

Recommendations
R1. The efficacy of twelve-hour shifts should be examined.

R2. A formal evaluation process including testing should be developed to determine if dispatchers can handle the extremes of boredom and high stress that they encounter on this job as well as the long work span.

R3. An effective communication system between helicopter dispatch and ground responders needs to be implemented.

R4. Experience is very valuable for a dispatcher, and experienced dispatchers should be rewarded accordingly. The County Compliance Subcommittee should support the contract company’s pay and benefit package so it remains adequate to keep good employees from leaving.

R5. Since the GPS/CAD system is critically dependent on accurate and current information, the County Director of Emergency Services must assure the data is accurate and continually updated.

R6. Methods to avoid conflict of interest issues, as stated in F6, with the contract company and other ambulance companies must be implemented.

Required Responses to Findings
County Compliance Subcommittee: F6.

Required Responses to Recommendations
County Compliance Subcommittee: R1, R2, R3, R4, R5, and R6
County Director of Emergency Services: R5