TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER       DEPARTMENT: POLICE

DATE: SEPTEMBER 26, 2005       CMR:380:05

SUBJECT: EMERGENCY MEDICAL DISPATCH (EMD) PROGRAM

This is an informational report and no Council action is required.

BACKGROUND

A paramedic or firefighter does not have to be the first to arrive on the scene of a medical emergency; a dispatcher answering an emergency call can “be there” within milliseconds, providing medical information and critical instructions via telephone. The dispatchers become the principal link between the public in need of emergency medical assistance and the emergency medical response system. This is the basis of the Emergency Medical Dispatching program (EMD). The objective of the EMD program is to provide pre-arrival medical instruction to callers prior to the arrival of the Fire Department’s paramedics. These instructions enhance the overall delivery of emergency medical care provided to the public and, in critical situations, can provide life saving instruction (heart attack or difficulty breathing) critical to ensuring the patient receives the best possible chance of survival.

Providing pre-arrival instructions has become the prevailing practice and level of service available through most 9-1-1 centers. Other than Milpitas (which has plans to implement EMD in the near future), Palo Alto is the only other dispatch center in the area that does not currently provide this service. Although plans to implement EMD have been underway for the past couple of years, staffing levels in the Emergency Dispatch Center have been unstable, making it difficult to implement the program without placing an increased training and overtime burden on the staff. The Department recently implemented a new 4-11 hour day schedule that allowed the 32-hours of training required by the dispatchers to be completed without the requirement of overtime, resulting in a considerable savings. Updated training, required on a bi-annual basis, will also be conducted with a minimal impact on overtime.

Beginning on September 29, 2005, Palo Alto dispatchers will begin the implementation of the EMD program. This report provides detailed information about the program and its benefits to the community.
DISCUSSION

Through the provision of medically approved instructions, callers receive information varying from simple advice to detailed instructions for every kind of medical emergency from delivering a baby to Cardio Pulmonary Resuscitation (CPR) prior to the arrival of medical personnel. Dispatchers provide pre-arrival instructions from flip-cards, arranged so the dispatchers can question the callers and, based on the answers, move quickly to the card that contains the correct advice, information and instructions for the specific emergency.

The following are the various roles and responsibilities related to the program.

Emergency Medical Dispatcher (EMD) – The EMD is a dispatcher specifically trained in interview techniques, pre-arrival instructions, and call prioritization with a minimum of 32 hours of training, including techniques of airway and hemorrhage control, CPR, choking, childbirth instruction and scenario training. Each dispatcher will receive training to qualify them for the basic EMD and CPR certificates. Following the EMD training, the dispatchers will undergo additional scenario-based training in order to provide them with the opportunity to use their newly acquired skills in a practice environment. Dispatchers will be recertified every two years through the CPTs.

Emergency Medical Dispatch Quality Assurance (EMD-QA) – During the first year of the EMD Program, the Police Department will utilize an outside contractor with specialized training and expertise in EMD QA to conduct call audit reviews and provide timely, accurate, appropriate and verifiable data measuring compliance to protocol to the dispatchers, the Medical Dispatch Review Committee and Steering Committee. Utilizing an in-house quality assurance program, derived from the Council on Medical Services of the American Medical Association, the Department is able to effectively measure a dispatcher’s adherence to the protocols through evaluation of the emergency calls and delivery of pre-arrival instruction by the dispatcher. By providing timely feedback to the dispatcher on any deviations from the protocols, the Department is able to ensure that quality care is being provided.

Medical Director – The Department will utilize the services of the Fire Department’s Medical Director, who is licensed as a physician in the State of California and is board certified in emergency medicine. The Medical Director possesses knowledge of emergency medical systems in California and of the local jurisdiction which qualifies him to provide medical direction as a member of both the EMD Steering Committee and Medical Dispatch Review Committee (MDRC). The Medical Director is involved with the development of training and Continuing Professional Training (CPT) topics and is responsible for reviewing and approving all dispatch protocols, sanctioning the delivery of pre-arrival instructions and working with Police and Fire staff to prioritize medical responses when the Department implements Priority Dispatch (see below).

Medical Dispatch Review Committee (MDRC) – the MDRC is responsible for the formal process of reviewing the Quality Assurance Unit-generated compliance. The review will include the analysis of problematic and/or exemplary cases; implementation and follow-through of all report
forms; tracking mechanisms; training and quality assurance processes; and operational feedback reviews. Membership of the MDRC will include the Communications Manager, the Communications Training Coordinator, the Chief Public Safety Dispatcher and a Public Safety Dispatcher, and a Chief Officer from the Fire Department.

EMD Steering Committee – The Steering Committee is established to provide policy level oversight of the EMD program. The Steering Committee fosters orderly, careful and medically sound implementation and ongoing enhancement. Membership of the Steering Committee includes: the Medical Director, Fire Department EMS Chief, Technical Services Division Coordinator, Communications Manager and the Communications Training Coordinator.

Once Palo Alto’s 9-1-1 Communications Center becomes proficient with EMD skills, another component of EMD, Priority Dispatching, will be implemented. The Department routinely responds to medical emergencies using lights and sirens. This practice is not without risk of collision or unnecessary emergency response. The last phase of the EMD program assigns Fire Department apparatus response codes based upon the severity of the medical aid and downgrades the Advanced Life Support (ALS) response to Basic Life Support (BLS) levels when appropriate. Reducing the expedited responses of apparatus throughout the City minimizes the risk of traffic accidents and ensures more appropriate use of the BLS personnel and apparatus while maintaining the availability of the advanced life support paramedics and apparatus for the critical medical responses.

The National Academy of Emergency Medical Dispatch (NAEMD), a nonprofit organization, which includes more than 40 physicians, legal experts, EMD industry experts, state and federal administrators, educators and opinion leaders, has examined and approved medical protocol changes and an EMD certification course curriculum. The NAEMD certification courses are offered through Priority Dispatch, a private company that developed the Medical Priority Dispatch Systems (MPDS) protocols.

MPDS offers the strength and backing of the NAEMD and is utilized by more than 27,000 EMD-certified dispatchers in 2,300 agencies. Palo Alto Police Department has adopted the MPDS system and will be utilizing it as it implements EMD in Palo Alto.

**RESOURCE IMPACT**

The training costs related to implementation of EMD (approximately $7,500) was included in the Police Department’s Fiscal Year 2005-06 budget. The $25,000 needed for the Quality Assurance (QA) contract was also included the Department’s existing budget. No additional funding is required.

The implementation of EMD will have no appreciable impact on the workload in the dispatch center. MPDS implementation studies have shown that after an initial, brief EMD-familiarization
stage, appropriate use of the MPDS does not increase call-processing times due to time being saved by dispatchers not having to ad lib questions.

Although the Department will utilize an outside contractor to perform Quality Assurance during the first year, staff expects that in the future, the QA program will be handled in-house by existing supervisory personnel.

PREPARED BY:  
SHERYL CONTOIS  
Coordinator of Police Technical Services

DEPARTMENT HEAD:  
LYNNE JOHNSON  
Police Chief

CITY MANAGER APPROVAL:  
EMILY HARRISON  
Assistant City Manager