

**LAW ENFORCEMENT'S ROLE IN THE DELIVERY OF EMERGENCY
MEDICAL SERVICES IN MAINE**

ADVANCED LEADERSHIP ISSUES IN EMERGENCY MEDICAL SERVICES

BY: James L. Ellis
Holden Fire/Rescue Department
Holden, Maine

An applied research project submitted to the National Fire Academy
as part of the Executive Fire Officer Program

August 2001

ABSTRACT

The problem was identified that law enforcement officers in Maine have an unidentified role in the delivery of emergency medical services. The purpose of this applied research project was to determine what level of training and scope of practice law enforcement officers should have relating to the delivery of emergency medical services in Maine. Both descriptive and evaluative research methodologies were used to answer the following questions:

Question 1. What level of emergency medical services is law enforcement currently providing in Maine?

Questions 2. What level of emergency medical service should law enforcement officers in Maine provide?

Questions 3. What level of emergency medical training should law enforcement officers in Maine be provided?

The procedures in this research included selecting the law enforcement agencies to be studied, which were the 141 local, county and state law enforcement agencies with patrol functions within the State of Maine. A literature review of law enforcement's involvement in the delivery of emergency medical services was conducted to examine what role law enforcement officers currently play in the delivery of emergency medical care, the level of medical training required of law enforcement officers and the benefits of initial emergency medical care by law enforcement officers. A survey was conducted of local, county and state law enforcement agency leaders in Maine to determine what level of medical training law enforcement officers currently possess. The law enforcement agency leaders were also asked about their views and concerns regarding

law enforcement's role in the delivery of emergency medical care. The results of this research determined that that nearly 70% of law enforcement agencies in Maine currently respond to routine medical emergencies. In many cases law enforcement officers arrive and are able to begin medical care prior to the arrival of the ambulance or rescue unit. Although training at the first responder level is required by the Maine Criminal Justice Academy less than 25% of law enforcement officers represented by the survey were identified as having maintained this level of training.

Recommendations include that all law enforcement officers in Maine receive training at the first responder level. All law enforcement officers should also complete an EMS refresher course every three years. Additionally, all law enforcement officers in Maine should be trained in the use of automated external defibrillators. Finally, AED's and basic first aid kits should be provided in every police cruiser in Maine. With appropriate training, medical supervision and emergency medical equipment, law enforcement officers in Maine can become a critical partner in the emergency medical service team.

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INTRODUCTION

Public safety agencies across the United States are continuously striving to be responsive to the needs of their communities, while at the same time often mandated to do more with less. As these public safety agencies struggle to balance community need with resources they are now, more than ever, looking to cross traditional role boundaries in an effort to better serve the public. Functions that were once reserved for only one public safety agency are now often shared by several public safety agencies within the same community. The most notable public safety function, which has become shared is the delivery of emergency medical services. While this role has traditionally been the responsibility of the fire department or a third service emergency medical service (EMS) agency, it is becoming clear that law enforcement has a vital role in the delivery of pre-hospital emergency medical care.

The simple nature of police patrol activities naturally places law enforcement officers throughout communities and neighborhoods in an effort to deter crime and immediately respond to crimes in progress and handle other law enforcement complaints. Fire departments and third service EMS agencies, however typically stage their apparatus and personnel in stations throughout the community or response district. In some urban areas EMS agencies use system status management to stage ambulances and rescue units in strategic areas based on call volume and time of day (FEMA, 2000). Because police officers are already on patrol in neighborhoods they are effectively utilizing system status management and therefore often arrive at the scene of a medical emergency before other EMS providers. “For this reason, many officers may be in a position to initiate basic assessment and treatment of patients” (Alonso-Serra, 1997). Additionally, during the

course of their normal work, such as responding to automobile accidents and assaults, “law enforcement officers frequently find themselves in situations where medical training might be useful” (Alonso-Serra, 1997).

The problem is that law enforcement officers in Maine have an unidentified role in the delivery of emergency medical services. Maine is primarily a rural state with many communities served solely by volunteer fire and emergency medical service agencies. This situation is compounded by the great distances fire and EMS agencies must often cover. Police protection is provided throughout the State of Maine by State, County and local law enforcement agencies who have police officers assigned and on patrol in these rural areas nearly 24 hours per day. Very often these officers are able to quickly respond to requests for medical assistance. “The police feel that when a citizen makes an emergency call for help, it has a great psychological impact to the community when someone in uniform shows up as soon as possible to the scene” (Jakubowski, 1993).

The purpose of this applied research project was to determine what level of training and scope of practice law enforcement officers should have relating to the delivery of emergency medical services in Maine. This research project employed both the descriptive and evaluative research methodologies to answer the following questions:

Question 1. What level of emergency medical services is law enforcement currently providing in Maine?

Questions 2. What level of emergency medical service should law enforcement officers in Maine provide?

Questions 3. What level of emergency medical training should law enforcement officers in Maine be provided?

BACKGROUND AND SIGNIFICANCE

As we enter the twenty-first century “traditional methods of providing fire and life safety services to communities are being replaced with innovative service delivery methods” (Boomgaarden, 1996). This is extremely true with regard to emergency medical services. The State of Maine, with a population of 1.2 million citizens (U.S. Census, 2002) and comprising of 31,000 square miles, is predominately rural in nature. Portland, Lewiston, Auburn and Bangor are the only metropolitan areas. Volunteer and combination fire departments, as well as third service EMS agencies, typically respond to medical emergencies in these rural areas. The average on scene response time for Maine EMS services is approximately six minutes (Maine Emergency Medical Services, 2001). In the more rural areas response times increase greatly, with 24% of Maine EMS services reporting response time averages between nine and twelve minutes (Maine Emergency Medical Services, 2001). Police officers on patrol in these rural areas are often closer than fire and EMS units and therefore arrive on scene sooner.

Historically, law enforcement officers in Maine have only responded to motor vehicle accidents and assisted EMS personnel with disturbed or dangerous patients. With the statewide inception of Enhanced 911 in 2001, most public safety agencies in Maine began utilizing regional communication centers. These regional dispatch centers provide dispatching services for police, fire and emergency medical service agencies. One result of combined dispatching is that multiple public safety agencies are now notified of emergency situations simultaneously. Police officers on patrol are notified of emergency medical incidents within their patrol area and now find themselves responding to medical emergencies and providing initial care to the sick and injured prior to the arrival of the

local fire department or EMS agency. Police feel that responding the nearest patrol unit to the scene of a medical emergency “is advantageous due to the fact that a person with some training arrives quickly on the scene, improving scene evaluation and information flow to the public safety agencies” (Jakubowski, 1993). Additionally, police act as first responders administering basic first aid and performing life saving functions. “Rapid delivery of emergency care is critical for a positive outcome in many medical emergencies, especially cardiac arrest” (Alonoso-Serra, 1997). “Right now early CPR and rapid defibrillation combined with early advanced care can result in high long-term survival rates for witnessed ventricular fibrillation” (American Heart Association, 2002).

With the added responsibility of responding to emergency medical incidents, “many law enforcement agencies require their officers to have some level of medical training and to participate in patient care” (Alonoso-Serra, 1997). The proper training of police officers, who are now serving as first responders to medical and traumatic emergencies is critical. “The role of the first responder is a special one. While the emergency medical services system is comprised of a talented team of many individuals at different certification levels, first responders are the one’s who will arrive first” (Karren, 1998). “An ill or injured patient may need immediate medical care to prevent permanent disability or death. Too often those who arrive first at the scene of an emergency are not trained to give proper care. As a result, patients who might be saved die” (Karren, 1998).

As law enforcement agencies in Maine undertake this new initiative, questions arise as to what level of emergency medical service law enforcement officers should provide and what basic medical training must be provided for these patrol officers.

Traditionalist, within law enforcement may not be strong supporters of medical response by patrol officers, however “many police commanders admit that there is some role for police in responding to these types of calls although they may be less clear on the nature and extent of this role” (Jakubowski, 1993).

This applied research project was completed in accordance with the applied research requirements of the National Fire Academy’s Executive Fire Officer Program. The problem addressed by this project related specifically to Module 1: Leadership, and Module 8: Changes in Health Care Delivery, as presented in the Advanced Leadership Issues in Emergency Medical Services course. Because the law enforcement officer’s role in the delivery of emergency medical services is a cultural change, good leadership and management tools are critical for success. “Leaders must communicate their vision to others for it to become a shared vision” (FEMA, 2000).

LITERATURE REVIEW

The literature review for this project provided key insights into various factors that affect the law enforcement’s role in the delivery of emergency medical services and focused on three questions: (1) What level of emergency medical services is law enforcement currently providing in Maine? (2) What level of emergency medical service should law enforcement officers in Maine provide? (3) What level of emergency medical service training should law enforcement officers in Maine be provided? These three topics were researched primarily through reviewing published documents at the National Emergency Training Center Resource Center in Emmitsburg, Maryland, at the Bangor Public Library in Bangor, Maine and from the author’s personal library. The first and third questions were also researched by conducting a survey of the police chiefs and county sheriffs

representing 141 law enforcement agencies in Maine that have patrol functions. The police chiefs and sheriffs provided not only demographic and departmental information, but also shared their perspectives and concerns relating to law enforcements role in the delivery of emergency medical services in Maine.

1. What level of emergency medical services is law enforcement currently providing in Maine?

The U.S. Department of Transportation (1996) reported that “many people with greatly diverse backgrounds contribute to the efficient operations of EMS systems” (p.25). In addition to citizen bystanders, these included public safety dispatchers, EMS first responders, emergency medical technicians, firefighters and law enforcement officers (U.S. Department of Transportation, 1996).

The Maine Criminal Justice Committee (2001) reported that there are currently 1,751 full time and 1, 025 part time law enforcement officers working in Maine (p. 21). In most communities these police officers work closely with their fire department and EMS colleagues. The Commission on Accreditation for Law Enforcement Agencies (1991), reported that periodic meetings between law enforcement and fire officials provide a forum for developing plans and for resolving other coordination problems that may arise (p.4-1). This close working relationship results in positive working relationships between law enforcement officers and fire/EMS personnel in the field. A benefit of this cooperation is that members of each agency tend to cross traditional boundaries in an effort to help their colleagues from other public safety agencies. The delivery of emergency medical services is a prime example of this cooperation and teamwork between agencies.

“Law enforcement officers, in the course of performing their duties, often encounter people in need of a type of help best provided by another criminal justice or social service agency” (Commission on Accreditation for Law Enforcement Agencies, 1991). Bigbee (1993) reaffirms the results of the Commission on Accreditation for Law Enforcement Agencies study and adds that every day law enforcement officers come into contact with people who need medical attention, including suspects and crime victims (p.1). Police officers patrolling the rural areas of Maine who have embraced the community policing philosophy respond to all types of medical emergencies, from automobile accidents to cardiac emergencies. Dale (2000) defined community policing as a policing philosophy that stresses the importance of police-community cooperation and the need to be responsive to the community (p.16).

Surveys were sent to the 141 municipal, county and state law enforcement agencies within Maine that provide patrol functions. These surveys sparked significant discussion about law enforcements’ role in the delivery of emergency medical services. Of the respondents, 67% reported that their police officers routinely responded to medical emergencies. 26% reported the minimum level of medical training required for their police officers was the first responder level. 22% reported that they had no medical training requirement for their officers.

2. What level of emergency medical service should law enforcement officers in Maine provide?

Jakubowski (1993) reported that police acting as first responders to medical emergencies provides for good public relations (p.6). Additionally, “the police enjoy a good relationship with the ambulance service” (1996). Alonso-Serra (1997) supports

Jakubowski's conclusions suggesting that police agencies who "add emergency medical care functions would improve the public image of their agencies" (p.500). Both Jakubowski's and Alono-Serra's research confirms the results of a report by the National Sheriff's Association (1985) which stated that "law enforcement personnel are essential members of the first response team arriving at an emergency or disaster situation" (p.28).

The Commission on Accreditation for Law Enforcement Agencies (1991) reported that agency patrol vehicles should be equipped with emergency medical supplies (p.63-2). With the more recent concern of blood borne and air borne pathogens, Cooley (2000) reported that in addition to basic first aid supplies "OSHA requires that all police vehicles must carry personal protective equipment" (p.6). Cooley (2000) adds "in California, police officers are considered first responders and by legislative opinion, are expected to provide lifesaving first aid" (p.5).

In a medical emergency, time is critical. Karren (1998) states "the Maryland Institute of Emergency Medical Services describes the time immediately after an accident as the 'Golden Hour'. This is when lives that hang in the balance can be saved by proper emergency care" (p.2). Karren (1998) adds that "first responders play a vital role in the emergency medical care of patients experiencing illness or injury" (p.9). Alonso-Serra (1997) stated that "the concept of first responders was developed by EMS systems to reduce the roll-time interval, defined as the time from dispatch of a call to the arrival of the first responding unit" (p.498). "Perhaps the most important reason the role of the first responder is so critical is that they are responsible for the first few minutes with the patient" (Karren, 1998). First responder training includes airway management, patient

assessment, CPR, bleeding control, stabilization of injuries to the spine and extremities and assisting EMS providers (1998).

Jakubowski (1993) reported that “police have the opportunity to provide lifesaving assistance prior to the arrival of the ambulance (p.6). Alonso-Serra (1997) confirmed Jakubowski’s findings in a study of 800 police chiefs in the United States. 60% of the police chiefs agreed that law enforcement agencies should be involved in the delivery of emergency medical services (p.497). Jakubowski (1993) indicated that in addition to providing lifesaving services, “EMS is a natural way for police to build rapport with the community” (p.15). In Montgomery County, Pennsylvania police officers routinely respond to medical emergencies. “They have reduced the average response time for trained, well equipped medical personnel arriving to a call for assistance from around 9 minutes to 3 minutes” (Jakubowski, 1993)

Recently, studies have focused on the effects of early intervention and pre-hospital care of cardiac emergencies. “It has been well documented that survival after sudden cardiac death depends on rapid initiation of CPR and defibrillation” (Alonso-Serra, 1997). The American Heart Association (2002) has identified four links in the chain of survival for cardiac arrest victims. The first link is to recognize the medical emergency and call 911. The second link is early initiation of CPR. The third link is early defibrillation. The fourth, and final link is early advanced care by EMS. Many law enforcement agencies are now training their officers in not only CPR but also the use of automated external defibrillators (AED’s). “Defibrillation is a process in which an electronic device, called an automated external defibrillator, helps reestablish normal contraction rhythms in a heart that’s not beating properly” (American Heart Association,

2002). Jerrard (2001) reported that “the average survival rate of witnessed sudden cardiac arrest in the United States is 5%, but in areas that use early defibrillation programs the local survival rates jump as high as 20%” (p.2). The American Heart Association (2002) concurs with Jerrard regarding the need for early defibrillation for victims of cardiac arrest. “The sooner you provide defibrillation with the AED the better the victim’s chances of survival. For every minute that a person in cardiac arrest must wait to be defibrillated , their chance of survival decreases by 10%. After 10 minutes the chances of survival are less than 10% (American Heart Association, 2002).

Research done by White (2001) suggests that “EMS call-to-shock time interval will likely be more than five minutes” (p.4). As a proponent of police first response programs, which includes patrol officers carrying AED’s, White (2001) suggests that early defibrillation can reliably achieve a less-than-five minute call-to-shock time interval in more than 90% of cases (p.4). “Rochester, Minnesota added police defibrillation to its EMS system and reported high discharge rates survival rates from ventricular fibrillation. These survival rates reflect the rapidity with which defibrillation is accomplished” (White, 2001). White (2001) further reported that casinos have begun to utilize AED’s to treat cardiac arrest. Target collapse-to-defibrillation time intervals were three minutes or less. Of 105 victims who suffered sudden cardiac arrest, a remarkable 56 (53%) survived to discharge (p.4). Research by the American Heart Association (2002) supports the findings by White (2001). “In cities where defibrillation is provided within five to seven minutes, the survival rate from cardiac arrest is as high as 49%” (American Heart Association, 2002). The American Heart Association (2002) also noted the Rochester, Minnesota study which showed remarkable survival rates when police vehicles were

equipped with automated external defibrillators (p.2). “21 of 44 persons with out-of-hospital cardiac arrest were long term survivors. The survival rate of 21 out of 44 victims can be compared with the survival rate in New York, where 26 of 2,329 victims survived” (American Heart Association, 2002).

“Police work entails a vast amount of contact between the community and the officers” (Birzer, 1999). It is because of this contact that makes police officers ideal as first responders to medical emergencies. “The EMS system depends on the first responders actions to set the foundation for the remainder of the call. It is during this time that correcting a breathing problem or stopping bleeding will actually save a life” (Karren, 1998). “There is no doubt that police have a role in responding to medical emergencies. It would seem that since police and EMS have a common goal to protect life safety, the two services should work together to meet the needs of the public. A department truly committed to community policing will see the advantages of providing some type of emergency medical response” (Jakubowski, 1993).

3. What level of emergency medical service training should law enforcement officers in Maine be provided?

Training is the critical component to the success of any program, especially within the field of public safety. “The task of providing quality EMS care requires qualified, competent and compassionate people” (U.S. Department of Transportation, 1996). Esposito (1998) adds that “how police officers respond to medical emergencies, especially serious illnesses and accidents, can affect the patients and their families for years after tragedy” (p.1).

The effect of improper or lack of training police officers receive in the area of emergency medical care can have serious implications to the officers and their departments. “Agencies are now being held legally accountable for the actions of their personnel and for failing to provide initial or remedial training” (Commission on Accreditation for Law Enforcement Agencies, 1991). “One situation all departments would like to avoid is publicity such as that received by the Bellevue, Iowa Police Department in 1980 when two of their newer officers, responding to their first personal injury accident, transported an injured party in the trunk of their new squad car to keep from staining the seats with blood. These officers made an obvious error in judgment, although proper training and procedures may have prevented this incident from occurring” (Jakubowski, 1993). Garza (1990) reported another case where “a Michigan appeals court ruled that a lower court was correct in awarding \$500,000 to the wife of a man left brain-damaged after first responders improperly administered CPR” (p.18). In this Michigan case the “jury found that, although they were doing the best they could, they had not been properly trained and the city was at fault for sending them in the first place” (Garza, 1990).

Karren (1998) identified that “there are four levels of emergency medical training: First Responder, EMT-Basic, EMT-Intermediate, and EMT-Paramedic” (p.5). “The first responder is the first person on the scene with medical training. He or she may be a police officer, firefighter, a truck driver, a school teacher, an industrial health officer or a community volunteer” (Karren, 1998). The U.S. Department of Transportation (1996) also indicated that The National EMS Education and Practice Blueprint established

standard knowledge and practice expectations for the same four levels of EMS providers listed by Karren (1998).

The National Sheriff's Association (1985) identified the first responder course as an educational standard for police officers (p.6). "The Law Enforcement First Responder Course is designed to improve the capability and quality of performance of law enforcement officers who may be among the first responders to an emergency or disaster" (National Sheriff's Association, 1985). Research by Jakubowski (1993) confirmed the findings of the National Sheriff's Association that "the training level recommended for police officers is the Department of Transportation First Responder Course" (p.2). Additionally, The Commission on Accreditation for Law Enforcement Agencies (1991) reported that each law enforcement agency should provide a recruit training curriculum that provides emergency medical training equivalent to that contained in the Emergency Medical Services First Responder Course of the National Highway Safety Administration, U.S. Department of Transportation (p.33-6). "The First Responder Training Course, a 40-hour training program that has been specifically developed for law enforcement, should be provided for all police officers" (The Commission on Accreditation for Law Enforcement Agencies, 1991).

The Commission on Accreditation for Law Enforcement Agencies (1991) stated "well trained officers are generally better prepared to act decisively and correctly in a broad spectrum of situations" (p.33-1). The proper training of law enforcement officers in the field of emergency medical care serves not only the citizens of the community but also the officers themselves. "The ideal approach is to establish training curriculums and

operating procedures that reduce the threat to officers, thereby helping to limit agency liability” (Stewart, 1993).

Summary of the Literature

The objective of this research is to determine what level of training and scope of practice law enforcement officers should have relating to the delivery of emergency medical services in Maine. The literature review gave credence to this research. The role that law enforcement officers are taking in regard to emergency medical services is changing. In order to be effective, police officers must have a clearly identified role in the delivery of emergency medical services and must receive proper training in order to help the public and protect themselves during these times of crisis.

PROCEDURES

Definition of Terms

Emergency Medical Services – Network of resources linked together for the purpose of providing emergency care and transportation to victims of sudden illness or injury.

EMT-Basic – An emergency medical technician trained to the level above the EMS First Responder. He or she also can perform complex immobilization procedures, restrain patients and staff ambulances.

First Responder – The first person on the scene with emergency medical care skills, typically trained to the most basic EMS level.

Scope of Practice – Actions and care legally allowed to be provided.

Third Service – A unique independent EMS organization funded and operated by local government using government employees; not administered by fire or police departments.

Ventricular Fibrillation – A life threatening type of irregular heart rhythm in which the heart only quivers rather than beating.

This research project employed descriptive research methodologies to examine what level of emergency medical service law enforcement is currently providing in Maine and what level of emergency medical service training law enforcement officers in Maine should be provided. Evaluative research methodologies were used to examine what level of emergency medical service law enforcement officers in Maine should provide. The procedures used to complete this research began with a literature review of fire service journals, magazines and textbooks at the Learning Resource Center at the National Emergency Training Center in Emmitsburg, Maryland in August of 2001. Additional literature reviews were conducted at the Bangor Public Library in Bangor, Maine, the Holden Public Safety Library in Holden, Maine and the author's personal library between August, 2001 and January, 2002.

A survey instrument, entitled "Law Enforcement EMS Survey," was developed to gather information about the current status of Maine's state, county and local law enforcement agency's training and response to medical emergencies. A short answer survey was sent to 125 municipal Chief's of Police, 15 County Sheriff's, and the Chief of the Maine State Police. The survey was utilized to determine if law enforcement leaders were receptive to the idea of police officers providing emergency medical care. (See Appendix A). The information sought included department personnel strength, current

medical training levels of their police officers, average response times to medical emergencies, if their officers currently carried automatic external defibrillators and their views on law enforcement EMS. Of the 141 surveys which were sent 100 were completed and returned, four were returned as undeliverable and 37 were not returned. Information from the completed surveys was organized, analyzed and documented. Personal interviews were conducted with Jay Bradshaw, Director of Maine Emergency Medical Services Bureau, Drexel White, Licensing Agency for Maine EMS and Steven Giorgetti, Director of the Maine Criminal Justice Academy. The purpose of the personal interviews was to gain insight into Maine EMS licensing regulations and medical training standards at the Maine Criminal Justice Academy.

Assumptions and Limitations

The procedures used to complete this research project were based on several assumptions. First, it was assumed that all authors cited in the literature review performed objective and unbiased research. Second, it was assumed that each survey was completed by the intended respondent. Third, it was assumed that each respondent understood each question. Fourth, it was assumed that each survey respondent answered all questions honestly. Finally, it was assumed that survey respondents did not discuss the survey with other respondents prior to completing the survey.

Limitations that affected this research project included the limited research period allowed. This limited research period limited survey respondents to only law enforcement agencies within the State of Maine and did not allow for a national sampling.

RESULTS

Answers to Research Questions

Research Question 1. “The policing profession finds itself in the midst of an exciting, yet complex change. The community-oriented policing philosophy adapted by agencies nationwide continues to drive a fundamental change in policing” (Birzer, 1999). This is certainly true in respect to the delivery of emergency medical services by law enforcement officers in Maine. Police officers nationwide now routinely respond to not only automobile accidents but also to routine medical emergencies within their patrol areas.

The results of a survey sent to law enforcement agencies in Maine revealed that 67% routinely respond to medical emergencies in addition to automobile accidents. In fact, 78% reported that their officers arrived at the scene of the emergency before EMS personnel. The average statewide on-scene response time for EMS providers in Maine is six minutes (Maine Emergency Medical Services, 2001). The results of the law enforcement survey reflected that police officers arrive on scene in less than four minutes 54% of the time. The faster response time by police officers is often critical for not only trauma victims but also victims suffering from cardiac arrest where each minute without CPR and defibrillation decreases the victim’s survival rate by 10% (American Heart Association, 2002).

The training curriculum at the Maine Criminal Justice Academy reflects the increased involvement law enforcement has in the delivery of emergency medical services. The basic police school curriculum contains 480 hours of instruction. Included in these 480 hours is the 40-hour Department of Transportation first responder program

(Maine Criminal Justice Academy, 2001). The survey results of law enforcement agencies do not necessarily reflect this training however, as only 702 of the 2327 police officers identified by the survey are trained at the first responder level or higher. A possible explanation for the limited number of first responders is that there is no standard for maintaining EMS certification after completion of the basic police school.

Nearly two-thirds of law enforcement agencies in Maine currently respond to medical emergencies in Maine. The level of emergency medical training of the individual police officers vary greatly, from essentially no training up to the EMT-Paramedic level. Using a limited amount of equipment, these first responders perform initial patient assessment and interventions, which can result in a positive outcome for both the patient and the law enforcement agency.

Research Question 2. “There are three primary types of responses that police can make to medical emergencies: no response, allowing the call to be handled by other services that provide emergency medical services, or first response with transportation being provided by another agency” (Jakubowski, 1993). The rural nature of Maine strongly supports law enforcement involvement in the delivery of emergency medical services at the first response level. Through the combined efforts of law enforcement, fire and EMS agencies the citizens are better served when a medical emergency occurs. “The emergency medical service system is a network of resources linked together for one purpose. That purpose is to provide emergency medical care and transport to the victims of sudden illness or injury” (Karren, 1998). The Commission on Accreditation for Law Enforcement Agencies (1991) has specifically identified the 40-hour first responder course and level of training for all police officers (p.33-6).

“Police officers provide life-saving care, scene control, and manpower assistance. There is excellent cooperation between the organizations, resulting in good public relations, protection of crime scenes, and proper patient care even when an investigation is being initiated” (Jakubowski, 1993).

Law enforcement response to medical emergencies can greatly increase the chances for survival for the victims of accidents and sudden illnesses. The Law Enforcement EMS Survey revealed that 86% of the respondents believe that law enforcement should be involved in providing EMS for life-threatening situations. In areas where EMS response times are prolonged, long-term survival outcomes can be as little as 1% to 2% (American Heart Association, 2002). Police officers, with shorter response times than EMS, can be particularly effective in the event of cardiac arrest. Trained law enforcement officers can arrive quickly on the scene, begin CPR and utilize automated external defibrillators to reestablish heart rhythms. “The sooner you provide defibrillation with the AED, the better the victim's chances of survival” (American Heart Association, 2002). In this light, police should be provided automated external defibrillators and trained in their use. Although only 39% of respondents in the Law Enforcement EMS Survey reported that their departments currently have automated external defibrillators, a number of respondents reported that their departments were in the process of purchasing AED's and training their officers in AED use. “In areas where CPR training is widespread and EMS response is rapid, the survival rate increased from 7 percent to 26 percent when AED's were available to first responders” (American Heart Association, 2002).

The public relation benefits that law enforcement agencies can realize from responding to medical emergencies cannot be underemphasized. When police respond

to medical emergencies “there is good access to and contact with the public, which is a major part of community policing” (Jakubowski, 1993).

Although some will argue that training and responding to medical emergencies will take away from actual law enforcement work, research has found that medical responses actually take minimal time away from law enforcement work (Jakubowski, 1993). In a Philadelphia study it was found that responding to medical emergencies took up only an average of 6.5% of the department’s time (Jakubowski, 1993). The benefits to responding to medical emergencies are significant and clearly outweigh any detraction from traditional law enforcement tasks.

Research Question 3. Proper training is always a critical component to any successful program. Unfortunately, “everyday law enforcement personnel around the nation respond to thousands of situations poorly prepared and ill-equipped” (Stewart, 1993). “It is essential that law enforcement officers be trained to provide emergency first aid in different situations” (Commission on Accreditation for Law Enforcement Agencies, 1991).

The Commission on Accreditation for Law Enforcement Agencies (1991) stated in their report that “recruit training curriculum equivalent to that contained in the Emergency Medical Services: First Responder Course of the National Highway Traffic Safety Administration, U.S. Department of Transportation” (p.33-6) should be provided for all new police officers. In addition to the first responder training the American Heart Association (2002) recommends “all emergency personnel should be trained and allowed to use a properly maintained defibrillator if their job requires them to respond to persons suffering from cardiac arrest” (p.1). The American Heart Association (2002) further

reports, “early defibrillation is often called the critical link in the chain of survival” (p.1). “For every minute without defibrillation, the odds of survival drop 7 to 10 percent. A cardiac arrest victim who isn’t defibrillated within 8 to 10 minutes has virtually no chance of survival” (American Heart Association, 2002).

Additional training mandates is not something that law enforcement officials normally seek. However, in the Law Enforcement EMS Survey 78% of the respondents reported that their officers would be willing to undertake additional training to provide emergency medical care.

Several of the respondents in the Law Enforcement EMS Survey expressed concern with being unable to obtain State EMS licenses for their officers who had completed the First Responder or Basic EMT course but could not become licensed because the police agency did not hold an EMS service license. Maine law does require sponsorship by a licensed EMS service for an individual to obtain a license to practice emergency medical care at the first responder or EMT levels (Maine Emergency Medical Services, 1997). Maine EMS rules do however allow police or fire department members who do not hold themselves out as providers of emergency medical care to provide medical care up to their level of training at the scene of a medical emergency which they were dispatched for police or fire assistance (Maine Emergency Medical Services, 1996). Law enforcement agencies may become licensed as a non-transporting service if they meet the minimum requirements as set forth in the Maine EMS rules. If an agency becomes licensed as a non-transporting service, then their personnel may become licensed as First Responders or EMT’s. At the time of this research, the Maine State Police Tactical Team is the only law enforcement agency in Maine currently licensed by

the Maine Emergency Medical Services Bureau (Maine Emergency Medical Services, 1996).

DISCUSSION

1. What level of emergency medical services is law enforcement currently providing in Maine?

The findings of the researcher conclude that the “quick response and the performance of lifesaving techniques are two major advantages of emergency medical care by law enforcement officers” (Jakubowski, 1993). In 2000, there were 2,776 full-time and part-time police officers protecting the 1.2 million citizens of Maine (Maine Criminal Justice Academy, 2001). Many of these police officers, like the citizens they protect, are located in the rural areas of the state. In these regions access to rapid emergency medical care by EMS agencies can be difficult. Depending on the illness or injury, emergency medical care can arrive too late. In support of their local EMS service “many law enforcement agencies are involved to some extent in providing out-of-hospital emergency medical care” (Alonso-Serra, 1997). Most police officers on patrol have received emergency medical training at some level and many police cruisers carry emergency medical equipment that can be used in situations where minutes matter. These situations include automobile accidents and sudden illness such as cardiac emergencies.

The basic police school curriculum at the Maine Criminal Justice Academy includes the 40-hour Department of Transportation First Responder Course, as recommended by the Commission on Accreditation for Law Enforcement Agencies (1991). All full-time police officers must attend the 480-hour basic police school within

one year of their employment (Maine Criminal Justice Academy, 2001). As a result, most all full-time police officers in Maine have received this basic emergency medical training. One challenge that does exist is that there is no continuing medical training or re-certification requirement of police officers once they graduate from the Maine Criminal Justice Academy.

The results of the Law Enforcement EMS Survey revealed that 80% of the responding police departments have officers trained in CPR. 39% of the responding police departments reported that they carry automated external defibrillators in their cruisers. “Every community can benefit from implementing an early defibrillation program. By training first responders such as police officers in CPR and AED use communities can cut response times drastically” (Jerrard, 2001). In the case of sudden cardiac arrest, early defibrillation has often been called the critical link in the chain of survival (American Heart Association, 2002).

In some communities local police officers may also serve as members of the local ambulance or rescue squad. These police officers may have advanced training beyond the first responder level. 44% of the respondents in the Law Enforcement EMS Survey indicated that they had police officers trained at the EMT-Basic level. Eight police departments indicated they had licensed EMT-Paramedics working in their agency.

2. What level of emergency medical service should law enforcement officers in Maine provide?

The Commission on Accreditation for Law Enforcement Agencies (1991) recommended that police officers receive emergency medical training at the first responder level. “The police officers should be trained to administer emergency medical

care, provide basic life support and summons the ambulance and/or additional assistance” (Commission on Accreditation for Law Enforcement Agencies, 1991). In addition to the basic first responder training, law enforcement officers, as recommended by the American Heart Association (2002), should be trained on the use of and equipped with automated external defibrillators. This foundational emergency medical care training is knowledge that law enforcement officers will utilize throughout their careers and will have a direct impact on the citizens they serve.

Regardless of the incident, police presence on the scene of an emergency incident can often bring calm to chaos. “Police feel that their immediate response provides reassurance to both victims and families at a medical emergency” (Jakubowski, 1993). “Responding officers can have a great impact on the victim and their families” (Esposito, 1998).

In addition to the obvious benefits of improved patient care, law enforcement EMS is also a good public relation tool for law enforcement agencies. “It allows the public to get to know officers in a positive light, during non-confrontational incidents” (Jakubowski, 1993). Another advantage to law enforcement EMS in Maine is that because of the rural nature of the state and the difficulties volunteer EMS agencies have staffing ambulances and rescue squads, police officers can help augment the EMS crew. There is clearly an advantage “to police EMS when there is minimal crew or a critical patient” (Jakubowski, 1993).

3. What level of emergency medical service training should law enforcement officers in Maine be provided?

Quick responding police officers with proper medical training can make the difference between life and death in a medical emergency. These officers can “play a vital role in the emergency medical care of a patient experiencing an illness or injury” (Karren, 1998). However, whether responding to an automobile accident or a medical emergency, to be successful the police officers must be properly trained.

The Commission on Accreditation for Law Enforcement Agencies (1991) recommends all police officers receive training at the first responder level. In Maine, this training is provided to all full-time law enforcement officers at the basic police school (Maine Criminal Justice Academy, 2001). After graduating from the Maine Criminal Justice Academy, police officers are required to attend continuing education in a number of law enforcement areas including firearms, new law updates and dealing with barricaded persons (Maine Criminal Justice Academy, 2001). Unfortunately however, these officers are not required and may never again in their careers attend any type of medical training. These officers are then placed in a position where they can rapidly intervene in medical emergencies, but may lack proper training and be unable to help a patient, or even worse place themselves and their agency in an undesirable legal situation.

Recently, law enforcement agencies have been training their officers in the use of automated external defibrillators. “The American Heart Association advocates that all personnel whose job requires them to perform basic CPR be trained to operate and permitted to use defibrillators, particularly AED’s” (Alonso-Serra, 1997). “To make early defibrillation possible, it’s essential that a defibrillator be immediately available to emergency personnel responding to a cardiac arrest” (American Heart Association, 2002). In areas where EMS response time is extended, properly trained and equipped law

enforcement officers who are already on routine patrol in the area may be the victim's only hope of survival.

RECOMMENDATIONS

It is the recommendation of this author that full-time police officers in Maine continue to receive the 40-hour Department of Transportation First Responder Course as part of their basic police school training. Part-time police officers, as well, should receive basic first-aid training as part of their pre-service training. Consideration should be given to adding the entire 40-hour Department of Transportation First Responder Course to the pre-service training curriculum for part-time police officers. The Maine Criminal Justice Academy should require police officers, in addition to the existing continuing education requirements, to complete an EMS refresher course every three years as is currently required by Maine licensed First Responders and EMT's.

All police officers in Maine should be trained in the use of automated external defibrillators and receive refresher CPR and AED training each year. The Maine Criminal Justice Academy and the Maine Bureau of Emergency Medical Services should work in partnership to ensure that every police cruiser in Maine has a first-aid kit with emergency medical supplies and equipment and an automated external defibrillator. The availability of grants needs to be explored as a funding mechanism for assisting local law enforcement agencies with purchasing the AED's.

With appropriate training, medical supervision and emergency medical equipment, law enforcement officers can effectively become a critical part of the emergency medical service team.

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APPENDIX A

Law Enforcement EMS Survey

**LAW ENFORCEMENT EMS
SURVEY**

1. What size population does your agency serve?

A) Less than 5,000	B) 5,001 to 10,000
C) 10,001 to 25, 000	D) 25,001 to 50,000
E) Greater than 50,000	

2. How many police officers does your agency employ?

Full-Time: _____	Part-Time: _____
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3. What is the minimum required level of medical training for your police officers? (circle one)

CPR	AED	EMT	First Responder
Basic First Aid	Paramedic	No Requirement	

4. How many of your officers are currently trained at the following levels?

CPR _____	EMT _____	First Responder _____
Basic First Aid _____	Paramedic _____	AED _____

5. Do your police officers normally respond to medical emergencies other than motor vehicle accidents?

YES	NO
-----	----

6. If your police officers respond to medical emergencies, in most cases do they arrive at the scene before EMS personnel?

YES	NO
-----	----

7. For your agency, what is the average time from dispatch to arrival on the scene of an emergency call?

< 4 min.	> 8 min.
< 8 min.	> 15 min.

8. If your police officers respond to medical emergencies what is their primary role?

A) Scene Control

B) Assist EMS

C) Medical Treatment Prior to the Arrival of EMS

D) Primary Medical Care

9. Do your officers (cruisers) carry automated external defibrillators?

YES

NO

Please rate the following statements:

10. Law enforcement agencies should be involved in providing EMS for life threatening situations.

Strongly disagree 1 2 3 4 5 *Strongly Agree*

11. Officers in your agency would be willing to undertake additional training to provide emergency medical care.

Strongly disagree 1 2 3 4 5 *Strongly Agree*

12. Emergency medical care functions for your officers would interfere with their law enforcement responsibilities.

Strongly disagree 1 2 3 4 5 *Strongly Agree*

13. Emergency medical care functions improve the public image of your agency.

Strongly disagree 1 2 3 4 5 *Strongly Agree*

14. Do you have any other thoughts about this topic you would like to share?

If you would like a summary of the results of this survey please provide the following information:

Name:

Address:

APPENDIX B

Survey Results

**LAW ENFORCEMENT EMS
SURVEY**

1. What size population does your agency serve?

- A) Less than 5,000 (45%) B) 5,001 to 10,000 (30%)
 C) 10,001 to 25,000 (14%) D) 25,001 to 50,000 (7%)
 E) Greater than 50,000 (3%)

2. How many police officers does your agency employ?

Full-Time: 1656 Part-Time: 671

3. What is the minimum required level of medical training for your police officers? (circle one)

- CPR (28%) AED (10%) EMT (3%) First Responder (26%)
 Basic First Aid (17%) Paramedic (0%) No Requirement (22%)

4. How many of your officers are currently trained at the following levels?

CPR (1504) EMT 146 First Responder 548
 Basic First Aid 402 Paramedic 8 AED 501

5. Do your police officers normally respond to medical emergencies other than motor vehicle accidents?

YES (67%) NO (32%)

6. If your police officers respond to medical emergencies, in most cases do they arrive at the scene before EMS personnel?

YES (78%) NO (16%)

7. For your agency, what is the average time from dispatch to arrival on the scene of an emergency call?

- < 4 min. (54%) > 8 min. (9%)
 < 8 min. (23%) > 15 min. (5%)

8. If your police officers respond to medical emergencies what is their primary role?

A) Scene Control (26%) B) Assist EMS (52%)

C) Medical Treatment Prior to the Arrival of EMS (19%)

D) Primary Medical Care (0%)

9. Do your officers (cruisers) carry automated external defibrillators?

YES (39%) NO (61%)

Please rate the following statements:

10. Law enforcement agencies should be involved in providing EMS for life threatening situations.

(4%) (10%) (29%) (20%) (37%)
Strongly disagree 1 2 3 4 5 Strongly Agree

11. Officers in your agency would be willing to undertake additional training to provide emergency medical care.

(8%) (14%) (38%) (23%) (17%)
Strongly disagree 1 2 3 4 5 Strongly Agree

12. Emergency medical care functions for your officers would interfere with their law enforcement responsibilities.

(10%) (31%) (31%) (18%) (10%)
Strongly disagree 1 2 3 4 5 Strongly Agree

13. Emergency medical care functions improve the public image of your agency.

(3%) (4%) (19%) (29%) (45%)
Strongly disagree 1 2 3 4 5 Strongly Agree

14. Do you have any other thoughts about this topic you would like to share?

“Need officers for law enforcement functions.”

“Good idea for us to know emergency medical training.”

“As first responders we are well trained to save a life.”

“Cost of training and overtime has been prohibitive.”

“When a community is served by a full-time fire & rescue service, police do not need to be involved.”

“Our officers will respond to medical emergencies as long as no other police calls are pending.”

“I believe the expense of equipment and training makes it cost prohibitive.”

“We have found that having the officers trained as EMT’s serves the community very well.”

“Liability”

“No agency should be without an AED.”

“After completion of the first responder course at the MCJA students should be able to take the State test to become licensed.”

“Good idea but officers do not want the added responsibility.”

“It’s difficult to find good police officers; to broaden the job description could make the situation almost impossible.”

“EMT certification would be a major plus to the community.”

“All officers should be at least CPR and AED certified. The public is starting to expect it.”

If you would like a summary of the results of this survey please provide the following information:

Name:

Address: