

A Brief History of Emergency Medical Services and Trauma Systems in Texas

From the mid 1930s through 1970, emergency ambulance service in Texas was provided primarily by funeral homes. The hearse was designed to transport a human body, albeit deceased, in a horizontal position and the mortuary staff were accustomed to handling bodies. It became simply a matter of convenience and economy that funeral homes began to provide ambulance service for the ill and injured.

Ambulance operators were not regulated until the Texas Legislature passed Vernon's Annotated Civil Statute 4590b in 1947, which required emergency ambulances to be permitted and to carry a minimum amount of first aid equipment, a traction splint and oxygen. The law also required the ambulance personnel to have theoretical or practical knowledge of first aid as certified by the American Red Cross.

In 1965, the Texas Department of Health created the "Disaster Health and Medical Services Program" with Charles King as the Director. When the National Highway Safety Act of 1966 set forth criteria for adoption and effectuation by all states and local governments which focused on the quality of emergency care for persons injured on the highway, the department charged the program with the implementation of those criteria.

Several events converging in the late 1960s initiated the decline of the funeral home ambulance service and the advent of the modern EMS provider. Significant advances in trauma research, resulting from the Vietnam War, proved that well-trained non-physicians could save lives; the American College of Surgeons jointly with the American Academy of Orthopedic Surgeons, acting on a federal grant, developed an 80-hour comprehensive emergency prehospital training program called the Emergency Medical Technician (EMT) course for ambulance attendants; negative publicity associated with the potential conflicting interests of funeral home-provided ambulance service began to escalate; new federal laws governing the pay of ambulance attendants made it difficult for the funeral home provider to make a profit; and competition among private ambulance operators in the metropolitan areas was out of control with squads racing their rivals to scenes of accidents with little regard for public safety. As an economic consequence of these developments, funeral homes began to pass the responsibility for ambulance service to city fire departments, hospitals, private and volunteer ambulance operators, and county government operated services. Between 1969 and 1976, funeral home ambulance services dropped from 73% to 33% of the total services covering the state.

In 1970 the Disaster Health and Medical Services Program was changed to the "Civil Defense and Traffic Safety Program" and the program developed a 24 hour Emergency Care Attendant (ECA) course. Program employees conducted the first of these ECA courses along with the first basic EMT class across the state. About this time the Disaster Health and Medical Services Program also began to conduct ambulance inspections. From a total of 317 ECAs and 9 EMTs in 1970, the program rapidly expanded and by 1976 there were 2,491 ECAs, 2,606 EMTs, and 459 EMT-Paramedics certified by the department along with almost 1,300 ambulances that department staff inspected. Program staff also expanded from 47 in 1970 to 110 in 1976. It was apparent that staff could not meet the training demand and the program staff began to conduct Train the Trainer programs.

In 1973, the Texas Legislature enacted VACS 4447o in accordance with a federal mandate, which created the EMS Division within the Texas Department of Health and provided for the development of a coordinated EMS system in Texas. The department established guidelines for training, staffing, vehicles and equipment, but compliance was voluntary and unenforceable.

During the 1970s, the State Health Department created Public Health Regions across Texas and EMS Program staff were placed in these regional offices.

Chapter 4447o was amended in 1983 by the 68th Legislature mandating minimum requirements for training, certification, staffing, vehicle design, equipment standards, and licensing of ambulance operators. The provision for minimum staffing required two persons, trained for 40 hours and certified as Emergency Care Attendants, for each ambulance. Standards for higher levels of certification were also established including EMT, EMT- Intermediate, and Paramedic. The National Standard Curricula guidelines for each training program were adopted and requirements for maintenance of certification at each level were specified. Chapter 4447o also created the Bureau of Emergency Management which was charged with the implementation and enforcement of the new Act. The EMS Act was re-codified in 1987 as Chapter 773 of the Texas Health and Safety Code and in the code was amended in 1997 to require the licensing of Paramedics.

By the mid to late 1980s the issue of trauma care had grown and the Texas legislature wanted trauma care resources to be available to every citizen. The Omnibus Rural Health Care Rescue Act, passed in 1989, directed the Bureau of Emergency Management of the Texas Department of Health to develop and implement a statewide emergency medical services (EMS) and trauma care system, designate trauma facilities, and develop a trauma registry to monitor the system and provide statewide cost and epidemiological statistics. No funding was provided for this endeavor at that time.

The Texas Board of Health adopted rules for implementation of the trauma system in January 1992. These rules divided the state into twenty-two regions called trauma service areas (TSAs), provided for the formation of a regional advisory council (RAC) in each region to develop and implement a regional trauma system plan, delineated the trauma facility designation process, and provided for the development of a state trauma registry.

During the 76th legislative session, four million dollars was appropriated to a newly established EMS/Trauma System fund. Rules, which were adopted in April 1998, include requirements for EMS and hospital participation in regional trauma system development, development of regional system plans, and submission of data to the state registry. These funds were disbursed to EMS providers and RACs to promote system development, with a small percentage earmarked for uncompensated hospital trauma care.

The recently 77th legislature increased state funding for EMS/trauma system development by \$6 million per year. Additionally, \$1 million per year was appropriated for uncompensated tertiary care provided to out-of-county or out-of-service-area patients provided by designated trauma facilities. It should be noted, however, that this funding only begins to address the problem of uncompensated trauma care, which is estimated at over \$300 million a year.

Today, of the 728 EMS providers in Texas, 50 % are municipal operations, 20 % are private enterprises, 12 % are hospital-affiliated services and the rest are county, emergency service district, non-profit associations and volunteer organizations. There are currently still two funeral homes in Texas providing emergency ambulance service. Currently, the 71 Bureau and Regional staff certify, regulate, license and provide technical to 48,599 individuals, 728 Ambulance services with 3,300 vehicles and approximately 175 designate Trauma Facilities in Texas

Summary of EMS Regulatory History

- 1947 VACS 4490-b mandated minimum standards and permitting for emergency ambulance operators.
- 1966 National Highway Safety Act set forth criteria to improve quality of care for persons injured in highway accidents.
- 1973 VACS 4447-o provided for the development of a coordinated EMS system in accordance with the federal EMS Act of 1973.
- 1983 VACS 4447-o amended to mandate minimum requirements for training, staffing, vehicles, equipment and licensing of EMS providers.
- 1987 VACS 4447-o re-codified to Chapter 773, Texas Health and Safety Code.
- 1989 The Omnibus Rural Health Care Rescue Act, directed the Bureau of Emergency Management of the Texas Department of Health to develop and implement a statewide emergency medical services (EMS) and trauma care system
- 1993 Chapter 773 amended to allow the Texas Board of Health to determine criteria for personnel re-certification.
- 1997 Chapter 773 amended to create Licensed Paramedics.
- 1999 Chapter 773 amended to create a Governor-appointed advisory council, to change late fee structures, and provide a certification process and immunity for emergency medical dispatchers.