

**HIGHWAY SAFETY PROGRAM  
GUIDELINE No. 11  
EMERGENCY MEDICAL SERVICES**

Each State, in cooperation with its political subdivisions, should ensure that persons incurring traffic injuries (or other trauma) receive prompt emergency medical care under the range of emergency conditions encountered. Each of the component parts of a system should be equally committed to its role in the system and ultimately to the care of the patient. At a minimum, the EMS program should be made up of the components detailed in this chapter.

**I. REGULATION AND POLICY**

Each State should embody comprehensive enabling legislation, regulations, and operational policies and procedures to provide an effective system of emergency medical and trauma care. This legal framework should:

- A. Establish the program and designate a lead agency;
- B. Outline the lead agency's basic responsibilities, including licensure and certification;
- C. Require comprehensive planning and coordination;
- D. Designate EMS and trauma system funding sources;
- E. Require data collection and evaluation;
- F. Provide authority to establish minimum standards and identify penalties for noncompliance; and
- G. Provide for an injury/trauma prevention and public education program.

All of these components, which are discussed in different sections of this guideline, are critical to the effectiveness of legislation that is the legal foundation for a statewide EMS system.

**II. RESOURCE MANAGEMENT**

Each State should establish a central lead agency at the State level to identify, categorize, and coordinate resources necessary for overall system implementation and operation. The lead agency should:

- A. Maintain a coordinated response and ensure that resources are used appropriately throughout the State;
- B. Provide equal access to basic emergency care for all victims of medical or traumatic emergencies;
- C. Provide adequate triage and transport of all victims by appropriately certified personnel (at a minimum, trained to the emergency medical technician [EMT] basic level) in properly licensed, equipped, and maintained ambulances;
- D. Provide transport to a facility that is appropriately equipped, staffed, and ready to administer to the needs of the patient (section 4: Transportation); and
- E. Appoint an advisory council to provide a forum for cooperative action and maximum use of resources.

**III. HUMAN RESOURCES AND TRAINING**

Each State should ensure that its EMS system has essential trained persons to perform required tasks. These personnel include: first responders (e.g., police and fire), prehospital providers (e.g., emergency medical technicians and paramedics), communications specialists, physicians, nurses, hospital administrators, and planners.

Each State should provide a comprehensive statewide plan for stable and consistent EMS training programs with effective local and regional support. The State agency should:

- A. Ensure sufficient availability of adequately trained EMS personnel;
- B. Establish EMT-Basic as the state minimum level of training for all transporting EMS personnel;
- C. Routinely monitor training programs to ensure uniformity and quality control;
- D. Use standardized curricula throughout the State;
- E. Ensure availability of continuing education programs;
- F. Require instructors to meet State requirements;
- G. Develop and enforce certification criteria for first responders and prehospital providers; and
- H. Require EMS operating organizations to collect data to evaluate emergency care in terms of the frequency, category, and severity of conditions treated and the appropriateness of care provided.

**IV. TRANSPORTATION**

Each State should require safe, reliable ambulance transportation, which is critical to an effective EMS system. States should:

- A. Develop statewide transportation plans, including the identification of specific service areas;

- B. Implement regulations that provide for the systematic delivery of patients to appropriate facilities;
- C. Develop routine, standardized methods for inspection and licensing of all emergency medical transport vehicles;
- D. Establish a minimum number of providers at the desired level of certification on each response;
- E. Coordinate all emergency transports within the EMS system, including public, private, or specialty (air and ground) transport; and
- F. Develop regulations to ensure ambulance drivers are properly trained and licensed.

#### V. FACILITIES

It is imperative that the seriously injured patient be delivered in a timely manner to the closest appropriate facility. Each State should ensure that:

- A. Both stabilization and definitive care needs of the patient are considered;
- B. The determination is free of non-medical considerations and the capabilities of the facilities are clearly understood by prehospital personnel;
- C. Hospital resource capabilities are known in advance, so that appropriate primary and secondary transport decisions can be made; and
- D. Agreements are made between facilities to ensure that patients receive treatment at the closest, most appropriate facility, including facilities in other states or counties.

#### VI. COMMUNICATIONS

An effective communications system is essential to EMS operations and provides the means by which emergency resources can be accessed, mobilized, managed, and coordinated. Each State should require a communication system to:

- A. Begin with the universal system access number 911;
- B. Strive for quick implementation of enhanced 911 services which make possible, among other features, the automatic identification of the caller's physical location;
- C. Provide for prioritized dispatch (dispatch-to-ambulance, ambulance-to-ambulance, ambulance-to-hospital, and hospital-to-hospital communication);
- D. Ensure that the receiving facility is ready and able to accept the patient; and
- E. Provide for dispatcher training and certification standards.

Each State should develop a statewide communications plan that defines State government roles in EMS system communications.

#### VII. TRAUMA SYSTEMS

Each State should maintain a fully functional trauma system to provide a high quality, effective patient care system. States should implement legislation requiring the development of a trauma system, including:

- A. Trauma center designation, using American College of Surgeons Committee on Trauma guidelines as a minimum;
- B. Triage and transfer standards for trauma patients;
- C. Data collection and trauma registry definitions for quality assurance;
- D. Mandatory autopsies to determine preventable deaths; and
- E. Systems management and quality assurance.

#### VIII. PUBLIC INFORMATION AND EDUCATION

Public awareness and education about the EMS system are essential to a high quality system. Each State should implement a public information and education (PI&E) plan to address:

- A. The components and capabilities of an EMS system;
- B. The public's role in the system;
- C. The public's ability to access the system;
- D. What to do in an emergency (e.g., bystander care training);
- E. Education on prevention issues (e.g., alcohol or other drugs, occupant protection, speeding, motorcycle and bicycle safety);
- F. The EMS providers' role in injury prevention and control; and
- G. The need for dedicated staff and resources for PI&E programming.

#### IX. MEDICAL DIRECTION

Physician involvement in all aspects of the patient care system is critical for effective EMS operations. EMS is a medical care system in which physicians delegate responsibilities to non-physician providers who manage patient care outside the traditional confines of the office or hospital. States should require physicians to be involved in all aspects of the patient care system, including:

- A. Planning and protocols;
- B. On-line and off-line medical direction and consultation; and
- C. Audit and evaluation of patient care.

#### X. EVALUATION

Each State should implement a comprehensive evaluation program to effectively assess and improve a statewide EMS system. EMS system managers should:

- A. Evaluate the effectiveness of services provided to victims of medical or trauma-related emergencies;
- B. Define the impact of patient care on the system;
- C. Evaluate resource utilization, scope of service, patient outcome, and effectiveness of operational policies, procedures, and protocols;
- D. Develop a data-gathering mechanism that provides for the linkage of data from different data sources through the use of common data elements;  
and
- E. Evaluate both process and impact measures on injury prevention, and public information and education programs