

# **IOWA EMS SYSTEM STANDARDS**

**“What every Iowan can expect from  
Emergency Medical Services”**

**Iowa Department of Public Health  
Division of Acute Disease Prevention  
Emergency Response and Environmental  
Health**

**Bureau of Emergency and Trauma Services**

# Iowa Emergency Medical Services System Standards Overview

In 2010 the Iowa EMS System Standards were introduced as a change initiative that provides a consistent and accountable approach to promoting and protecting the health of Iowans through EMS. The 2010 version of the standards described, the minimum infrastructure (county) and EMS that all Iowans could reasonably expect from EMS no matter where they live in the state. The initiative was intended to be utilized to attain the goal of designing and implementing an integrated, measurable, sustainable state wide EMS System.

## **Background:**

In October, 2006 the Emergency Medical Services Advisory Council (EMSAC) was approached by the Bureau of EMS to support a change initiative involving EMS system standards. Discussions lead to a motion that “the Bureau should continue to develop draft standards and appoint partners to assist.” A group of 26 to 30 individuals were invited to participate through monthly meetings, in the development of a first draft version of minimum Iowa EMS System Standards. Progress reports were given to EMSAC in January and April, with the first draft version delivered to EMSAC in July, 2007.

The stakeholder group reviewed eight areas of EMS system development. These were:

- System Administration
- Staffing/Training
- Communications
- Response/Transportation
- Facilities/Critical Care
- Data collection/System Evaluation
- Public Information/Education
- Disaster Medical Response/Planning

In addition, while developing the minimum Iowa EMS System Standards, the stakeholder group used some guiding principles:

- Define basic minimum services and infrastructure that every EMS system should have in place
- Use clear, concise language that is easily understood by both the EMS/health care community and the general public
- Minimum standards should be measurable
- Keep in mind the principles of the national and state “EMS Agenda for the Future”

In 2010 the final version was released and has been well utilized for the last 7 years. Starting in 2016 a EMSAC established a System Standards Sub Committee to re-convene and update the published standards.

This subcommittee reviewed the original eight areas of EMS system development and using the same guiding principles condensed the areas to those standards that enhance systems but are not repetitive of Iowa Statute or Administrative Rule. There are over 900 authorized EMS service programs in the state of Iowa. Every one of these service programs are authorized by the state and function under operational standards dictated by administrative rule. These rules represent the baseline standard in order to protect the health of Iowans. To build EMS Systems we must strive to accomplish achievable standards above and beyond administrative rule. We must coordinate efforts at the dispatch, EMS and hospital levels in order to reduce inefficiency and redundancy in administration, training, education and overall costs of operation. We must hold the emergency response entities in our state to the utmost highest level to best serve our injured and ill.

This subcommittee worked diligently under the continued premise that an Emergency Medical Service (EMS) provides emergency medical care to individuals that experience illness or injury. Emergency medical response requires a coordinated effort that involves multiple responders and agencies working in concert to provide a seamless response to ensure that resources are available to meet the needs of the emergency. This coordinated effort represents the grass roots of system development. However, we must continue to reach for a higher standard.

## **2016 System Standards Sub Committee to The Emergency Medical Services Advisory Council**

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## Glossary of Terms

**ALS** - Interventions identified at the AEMT, EMT-P, or Paramedic level

**AMANDA** - The online registry and database for regulatory programs within the Bureau of Emergency and Trauma Services

**Ambulance** - As defined by rule: 641-132.1 (147A) Definitions. “Ambulance” means any privately or publicly owned ground vehicle specifically designed, modified, constructed, equipped, staffed and used regularly to transport the sick, injured or otherwise incapacitated.”

**Audit** - Review of a process

**BLS** - Interventions identified at the EMR, or EMT level

**Certification** - State of Iowa EMS Certification

**CQI** - As defined by rule: 641-132.1 (147A) Definitions. “Continuous quality improvement (CQI)” means a program that is an ongoing process to monitor standards at all EMS operational levels including the structure, process, and outcomes of the patient care event.” This can change to fit the system.

**Credentialing** - The process for ensuring knowledge, skills and ability to participate within the system.

**EMD (Emergency Medical Dispatch)** - “Emergency Medical Dispatching” shall mean the reception, evaluation, processing, provision of dispatch life support, management of requests for emergency medical assistance, and participation in ongoing evaluation and improvement of the emergency medical dispatch process. This process includes identifying the nature of the request, prioritizing the severity of the request, dispatching the necessary resources, providing medical aid and safety instructions to the callers and coordinating the responding resources as needed but does not include call routing per se.

**EMS** - As defined by rule: 641-132.1 (147A) Definitions. “Emergency medical services” or “EMS” means an integrated medical care delivery system to provide emergency and non-emergency medical care at the scene or during out-of-hospital patient transportation in an ambulance.”

**EMS System** - means an integrated medical care delivery system to provide emergency and non-emergency medical care at the scene or during out-of-hospital patient transportation in an ambulance.” The system shall be no smaller than a county.

**ESF** - Emergency Support Function

**Medical Director** - As defined by rule: 641-132.1 (147A) Definitions. “Medical director” means any physician licensed under Iowa Code chapter 148, 150, or 150A who shall be responsible for overall medical direction of the service program and who has completed a medical director workshop, sponsored by the department, within one year of assuming duties.”

**NIMS** - National Incident Management System.

**PSAP** - Public Safety Answering Point, generally a 911 system.

**Response Time** - From the time the agency was dispatched to patient contact on scene.

**Rural** -Non-Urban areas

**STEMI** - ST elevation Myocardial Infarction

**System Participant** - Service or Agency recognized by the EMS System

**Urban** - Communities within a county with a population greater than 10,000

**Wilderness** - Area without infrastructure

# Iowa EMS System Standards

## System Organization and Management

### **1.01 System Administration: EMS System Structure; Organization; Mission**

#### **MINIMUM STANDARDS:**

The EMS system shall have a county wide written vision and mission statement.

The EMS system shall have an advisory group with representation from one member of the County Board of Supervisors, one member from each of the EMS services in the county wide EMS System, and one EMS medical director (designated as the county wide EMS System medical director).

The EMS System advisory group shall annually:

1. Assess each of the Iowa EMS System Minimum Standards and make provisions accordingly for emergency medical services treatment and transport within the county.
2. Submit the assessment to the Iowa Department of Public Health Bureau of Emergency and Trauma Services.
3. Complete strategic plans to assure that gaps in Iowa EMS system standards assessments are met.
4. Develop policies and procedures to implement the Iowa EMS System Standards.
5. Identify funding mechanisms that are sufficient to ensure continued operation of the EMS System and services required to meet the needs of the population.

### **1.02 System Administration: Public Impact**

#### **MINIMUM STANDARD:**

The EMS system shall implement survey processes to obtain patient, healthcare and public input.

### **1.03 System Administration: Medical Director / Medical Direction**

#### **MINIMUM STANDARD:**

The EMS system shall have an active medical director that participates on the advisory council. If multiple medical directors work with services within the county EMS System, a medical director steering committee will be formed to support the County EMS System Medical Director.

In accordance with 641-132.8(3) The Medical Director Steering Committee will assure that written policies, procedures and/or protocols are in place for each service and consistent for all services in the County EMS System.

In accordance with 641-132.9 each EMS System medical director and/or medical director steering committee will assure off line and on line medical direction plans are in place to identify the role of hospitals, alternate medical control and the roles, responsibilities, and relationships of out-of-hospital providers.

### **1.04 System Administration: Inventory of Resources**

#### **MINIMUM STANDARD:**

The EMS System shall assess and document EMS resources and services available within the system's service area to respond to day-to-day and large scale emergency. In coordination with county partners a detailed inventory of EMS resources (e.g., personnel, vehicles, and facilities) within its area and, at least annually, shall update this inventory in the electronic system provided by the Bureau of Emergency and Trauma Services.

The EMS System advisory group shall annually review 911 services and the county EMS system as a whole based on this assessment to assure resources meet the needs of the public.



## **Staffing and Training**

### **2.01 Staffing: Personnel**

#### **MINIMUM STANDARD:**

The EMS system shall maintain up to date service rosters and assure provider certification.

The EMS System or services within the system shall have a policy regarding background checks.

The EMS system or services within the system shall notify the Bureau of Emergency and Trauma Services, as required by rule, of occurrences or potential violations that impact service license of individual EMS certification through the provided system for complaints (AMANDA)

The EMS system or services within the system shall credential personnel as per EMS certification level scope of practice and local protocol as authorized by the medical director.

The EMS System Advisory Group will assess staff numbers and staffing gaps in the system.

The EMS System Advisory Group will develop training plans for initial training to mediate staffing gaps.

The EMS System Advisory Group will develop a training plan that details anticipated trainings in the System as needed by services within the system. The plan will coordinate education and training opportunities to reduce duplication of efforts and leverage local and system funding.

### **2.02 Staffing: Dispatch Training**

#### **MINIMUM STANDARD:**

Public safety answering point (PSAP) operators with medical dispatch responsibilities and all medical dispatch personnel (both public and private) shall be trained and/or certified using an approved program.

The EMS System medical director and/or the medical director steering committee will collaborate with county PSAP (s) to implement Emergency Medical Dispatch services for all 911 calls for medical assistance.

## **2.03 Staffing: Non transport**

### **MINIMUM STANDARD:**

The EMS System shall ensure at least one person on each non-transporting service shall be a currently certified EMS provider. Public safety agencies and industrial first-aid teams not listed as services shall be utilized in accordance with EMS system policies.

EMR level agencies that are part of an EMS system are considered a public safety agency and shall be utilized in accordance with EMS system policies.

## **2.04 Staffing: Transport**

### **MINIMUM STANDARD:**

The EMS system shall ensure that all transport services providing primary 911 response staff at the highest level of the authorized service.

## **Communications**

### **3.01 Communications: Plan**

#### **MINIMUM STANDARD:**

The EMS system shall assess, at least annually, communications linkages (inter-operability) among providers (out of hospital and hospital) in its jurisdiction and recommend needed changes for their capability to provide service in the event of multi-casualty incidents and disasters.

The EMS system advisory group shall develop EMS communications plan for services in the system. The plan shall specify the medical communications capabilities of emergency medical transport vehicles; non-transporting agencies; and system participants.

The EMS system shall assure all emergency medical transport vehicles have the ability to communicate with a single dispatch center or disaster communications command post.

The EMS system shall have a functionally integrated dispatch with system-wide emergency management coordination, using standardized communications frequencies.

The EMS system will work to establish an emergency medical dispatch priority reference system, including systemized caller interrogation, dispatch triage policies, and pre-arrival instructions.

### **3.02 Communications: 911 Coordination**

#### **MINIMUM STANDARD:**

The EMS system advisory group shall seek to have an active member appointed to the county 911 commission in order to participate in ongoing planning and coordination of the enhanced 9-1-1 system

### **3.03 Communications: Education**

#### **MINIMUM STANDARD:**

The EMS system shall be involved in public education regarding system access.

## **Response & Transportation**

### **4.01 Response & Transportation: Service Area**

#### **MINIMUM STANDARD:**

The EMS system shall, in coordination with neighboring EMS systems, determine the emergency medical service response areas, to assure the most efficient 911 responses.

### **4.02 Response & Transportation: Change to Policies and Procedures**

#### **MINIMUM STANDARD:**

The EMS system advisory group shall develop standard policies and procedures regarding response, transport and minimum response times.

The following response times will be outlined in policies and procedures as standard for 911 responses for CQI purposes:

- The response time for first responders does not exceed:  
    Urban-5 minutes  
    Rural-15 minutes
  
- The response time for an ambulance (not functioning as a first responder) does not exceed:  
    Urban-8 minutes  
    Rural-20 minutes
  
- The response time for advanced life support does not exceed:  
    Urban-8 minutes  
    Rural-20 minutes

Policies and procedure will include response type, minimum response times, backup response plan, peak response backfill and transport protocols.

The EMS system shall have contingency plans and assure the development of mutual aid agreements to provide for emergent and non-emergent response and transport during increased system volume.

## **4.03 Response & Transportation: Air-Medical Services**

### **MINIMUM STANDARDS:**

The EMS system shall have a process for identifying specialty air-medical transport services and shall develop policies and procedures regarding:

- Request of air-medical services
- Addressing and resolving formal complaints

## **Facilities/Critical Care**

### **5.01 Facilities: Assessment of Capabilities**

#### **MINIMUM STANDARD:**

The EMS system advisory group shall annually assess the capabilities of acute care facilities in its service area to include trauma level, STEMI, Stoke, OB, ortho and any other specific patient criteria.

The EMS system advisory group shall assure that services within the system have updated information regarding facility capacity.

### **5.02 Facilities: Trauma Care system**

#### **MINIMUM STANDARD:**

The EMS system and all services within the system shall follow the Out of Hospital Trauma Triage Destination Decision Protocol.

### **5.03 Trauma Care Facility Verification**

#### **MINIMUM STANDARD:**

The EMS system partners shall participate in the trauma verification process as available in system area.

## **Data Collection/System Evaluation**

### **6.01 System Evaluation: Continuous Quality Improvement Program**

#### **MINIMUM STANDARD:**

The EMS system shall establish an EMS CQI program to evaluate the response to emergency medical incidents and the care provided to specific patients. The program shall address the total EMS system, including all pre-hospital provider agencies and hospitals. It shall address compliance with policies, procedures and protocols and identification of preventable morbidity and mortality and document resolution of deficiencies found.

The EMS system shall establish an EMS CQI program to evaluate quality management, quality assurance and the system capabilities in order to establish benchmarks. The program shall address the total EMS system from dispatch to patient outcome.

The EMS system shall conduct audits of out-of-hospital care including overall EMS system response to ensure that the patients' needs were matched to available resources including but not limited to established benchmarks. It shall address compliance with policies, procedures and protocols and identification of preventable morbidity and mortality and document resolution of deficiencies found.

The EMS system shall develop and implement a procedure to review medical dispatch to assess if the appropriate level of medical response is sent for each 911 call and to monitor the appropriateness of pre-arrival/post dispatch directions.

The EMS system shall have a process to address and resolve formal complaints.

The EMS System advisory group shall identify mechanisms and persons to complete the county wide strategic plans to meet the Iowa EMS System Standards and CQI plans.

The EMS System advisory group shall meet at least annually to review the System Standards plan and CQI plan.

### **6.02 System Evaluation: Provider/Service Participation**

#### **MINIMUM STANDARD:**

The EMS system shall require provider/service participation in the system wide evaluation programs.

### **6.03 System Evaluation: Reporting**

#### **MINIMUM STANDARD:**

The EMS system shall complete an annual, report on the results of the evaluation of EMS system operations to the County Board of Supervisors.

### **6.04 Data Collection: Pre-hospital Record**

#### **MINIMUM STANDARD:**

In accordance with IAC 641-132.8(3) a all services within a system will complete and maintain a patient care report, provide a verbal report upon delivery of a patient and shall provide the completed patient care report within 24 hours to the receiving facility

### **6.05 Data Collection: Data Management System**

#### **MINIMUM STANDARD:**

The EMS system services shall participate in an integrated data management system that collects and submits reportable data as directed in accordance with IAC 641-132.8 (3) q that includes system response and clinical (pre-hospital, hospital and public health data.

The EMS system shall utilize the system to review reports and review outcome data.

## **Public Information and Education**

### **7.01 Public Information:**

#### **MINIMUM STANDARD:**

The EMS system shall promote the development and dissemination of information for the public that address:

1. Understanding of the EMS system.
2. Access to the system
3. Provide public CPR, first aid training, etc.
4. Patient and consumer rights as they relate to the EMS system
5. Health and safety habits as they relate to the prevention and reduction of health risks in target areas
6. Promote injury control and preventive medicine

### **7.02 Public Information: Disaster Preparedness**

#### **MINIMUM STANDARD:**

The EMS system, shall participate in the development of community wide capabilities through system development to support ESF-8 Public Health and Medical Services preparedness and response.

## **Disaster Medical Response**

### **8.01 Disaster Medical Response: Planning**

#### **MINIMUM STANDARD:**

The EMS system shall participate with local response partners including public health, hospitals and EMA to develop plans, procedures and policy to respond effectively to the medical needs created by disasters.

The EMS System advisory group shall collaborate with partners to utilize federal emPOWER data, community health needs assessments, and other available data sources to assist in identifying special at-risk populations and develop strategies to fill gaps related to special at-risk populations.

The EMS System shall collaborate with local response partners to identify exercise priorities.



The EMS System will participate in a minimum of one exercise per year that includes local response partners and assist in the completion and submission of an after action report improvement plan

## **8.02 Disaster Medical Response: Response Plans/Review**

### **MINIMUM STANDARD:**

The EMS System shall have medical response plans and procedures for disasters which shall be applicable to multi-hazard response.

a) The EMS system shall annually review and update the disaster medical response plans that are inclusive of all ESF-8 partners based on exercise lessons learned and after action improvement plans.

## **8.03 Disaster Medical Response: Emergency Operation Centers**

### **MINIMUM STANDARD:**

The EMS system shall be represented and participate with their local response partners in the development and exercise of a plan for activation, operation and deactivation of the emergency operation center.

## **8.04 Disaster Medical Response: Hazardous Materials Training**

### **MINIMUM STANDARD:**

The EMS System shall ensure all EMS providers are properly trained for response to hazardous materials awareness. The service will determine the required system role, train and equip the staff.

## **8.05 Disaster Medical Response: Plan Participation (ICS)**

### **MINIMUM STANDARD:**

The EMS system shall assure that services are capable of implementing all components of the National Incident Management System, including training and incident command

