



EMS Scope of Practice, Protocols, and Medical Control and Direction for AMR/FEMA Federal Disaster Deployments

Revised 7/27/2010

American Medical Response (AMR) is under contract with the Federal government to provide EMS in response to Federally-declared disaster as approved by FEMA. Each state defines and regulates the scope of practice for EMS personnel within its borders. It is anticipated that EMS responders from various states may be deployed to disasters pursuant to the AMR/FEMA Federal National Ambulance Service Contract. The purpose of this guide is to establish a minimum scope of practice for all authorized EMS disaster providers, regardless of their state of origin. This guide is limited to those EMS responders who are officially deployed by AMR to respond to Federal disasters pursuant to the AMR/FEMA Contract. For EMS deployments pursuant to the AMR/FEMA Contract, the *National EMS Core Content*¹ will be used to define the domain of out-of-hospital care. The scope of practice for the AMR/FEMA Contract shall be the *National EMS Scope of Practice Model*².

Role of the National EMS Scope of Practice Model

The *National EMS Scope of Practice Model* shall be used to identify the psychomotor skills and knowledge necessary for the minimum competence of each nationally identified level of EMS provider who responds to an event pursuant to the AMR/FEMA Federal National Ambulance Service Contract. It divides the core content into levels of practice, defining the minimum corresponding skills and knowledge for each level.

The Role of State Government

During most disasters, each State has the statutory authority and responsibility to regulate EMS within its borders, and to determine the scope of practice of State-licensed EMS personnel. The *National EMS Scope of Practice Model* is a consensus-based document that was developed to improve the consistency of EMS personnel licensure levels and nomenclature among States; it does not have any regulatory authority.

The development and publication of the *National EMS Scope of Practice Model* represents a transition from the historical connection between scope of practice and the EMS National Standard Curricula. The *Scope of Practice Model* is a consensus document, guided by data and expert opinion that reflects the skills representing the *minimum* competencies of the levels of EMS personnel. The *Scope of Practice Model* will serve EMS in the future, as it is revised and updated to include changes in medical science, new technology, and research findings.

While each State has the right to establish its own levels of EMS providers and their scopes of practice, staying as close to this Model as possible, *and especially not going below it for any level*, will facilitate reciprocity, standardize professional recognition, and decrease the necessity of each State developing its own education and certification materials.

Some states permit licensed EMS personnel to perform skills and roles beyond the minimum skill set as they gain knowledge, additional education, experience, and (possibly) additional certification. The adoption of skills and roles beyond those in the Model will diminish national consistency and may impede interstate mobility and legal recognition for EMS personnel. If the EMS regulatory authorities in disaster-affected states wish to have AMR/FEMA Contract providers perform skills beyond their legal scope in their state of origin, the disaster state must provide the additional education and certification.

Scope of Practice During Disasters, Public Health Emergencies, and Extraordinary Circumstances

It is virtually impossible to create a scope of practice that takes into account every unique situation, extraordinary circumstance, and possible practice situation during disasters. This is further complicated by the fact that EMS personnel are an essential component of disaster preparedness and response. In many cases, EMS personnel are the only medically trained individuals at the scene of a disaster when other health care resources may be overwhelmed. This document cannot account for every situation, but rather is designed to establish a system that works for entry-level personnel under normal circumstances. It is assumed that the scope of practice of EMS personnel may be modified or changed in times of disaster or crisis with proper education, medical oversight, and quality assurance to reasonably protect patient safety.²

Crisis Standards of Care for Use in Disaster Situations

For disaster scenarios in which the health system may be stressed to its limits, it is important to describe the conditions under which standards of care would change due to shortage of critical resources. “Crisis standards of care” is defined as a substantial change in usual health care operations and the level of care it is possible to deliver, which is made necessary by a pervasive (e.g., pandemic influenza) or catastrophic (e.g., earthquake, hurricane) disaster. This change in the level of care delivered is justified by specific circumstances and is formally declared by a state government, in recognition that crisis operations will be in effect for a sustained period. The formal declaration that crisis standards of care are in operation enables specific legal/regulatory powers and protections for healthcare providers in the necessary tasks of allocating and using scarce medical resources and implementing alternate care facility operations.³

The goal of the health and medical response to a mass casualty event is to save as many lives as possible. To achieve this goal, health and medical care will have to be delivered in a manner that differs from the standards of care that apply under normal circumstances. The U.S. Department of Health and Human Services, Agency for Health Care Research and Quality has prepared a document, *Altered Standards of Care in Mass Casualty Events*⁴, which addresses some of these issues. Some of the key elements of an EMS mass casualty response are summarized below.

- The goal of an organized and coordinated response to a mass casualty event should be to maximize the number of lives saved.
- Changes in the usual standards of health and medical care in the affected locality or region will be required to achieve the goal of saving the most lives in a mass casualty event. Rather than doing everything possible to save every life, it will be necessary to allocate scarce resources in a different manner to save as many lives as possible.
- The basis for allocating health and medical resources in a mass casualty event must be fair and clinically sound. The process for making these decisions should be transparent and judged by the public to be fair.
- Protocols for triage need to be flexible enough to change as the size of a mass casualty event grows and will depend on both the nature of the event and the speed with which it occurs.

- Only the authorized healthcare regulatory authority for the disaster has the authority to activate or sanction the use of altered standards of care under certain conditions.
- Legal issues related to liability, licensing, and intergovernmental or regional mutual aid agreements must be addressed.

Specializations

In some cases, specialty certifications may be used to respond to local needs for flexibility or to recognize continuing education. Specialty certifications may evolve to accommodate subtle differences in skills, practice environment, knowledge, qualifications, services provided, needs, risk, level of supervisory responsibility, amount of autonomy and/or judgment/critical thinking/decision making.²

Scope of Practice for Special Populations

EMS professionals are expected to meet the urgent health care needs of all patients, regardless of age or co-morbidity, consistent with their defined scope of practice. Recognized special populations include, but may not be limited to, children, older patients, patients with disabilities, and patients with limited access to health care due to geographic, demographic, socioeconomic, or other reasons.²

Scope of Practice for EMS Personnel Functioning in Nontraditional Roles

During disasters, EMS professionals may be required to function in health care settings other than out-of-hospital care. Common settings include, but are not limited to, emergency departments, hospital units (including critical care), shelters, urgent care settings, free-standing medical units, etc. State regulations must be clear as to the extent to which the State's EMS scope of practice applies to EMS personnel functioning in these nontraditional roles and settings.

Providing EMS Mass Medical Care with Scarce Resources

In the event of a catastrophic disaster, the resulting mass casualties will likely overwhelm the local EMS resources and community health care systems. Indeed, if the event incapacitates health care workers, damages facilities, or destroys supplies, the capacity of the health care system to respond may be severely compromised. If other communities are faced with similar demands (as would be the case of an influenza pandemic or a nuclear detonation, for example), the arrival of additional health care resources, including assistance from the Federal Government, likely would be significantly delayed⁵. EMS providers from across the U.S. may be called upon pursuant to the AMR/FEMA National EMS Contract to provide first-responder rescue, assessment, care, and transportation and access to the emergency medical health care delivery system. In these mass casualty events (MCE), it may be necessary to allocate scarce resources in a manner that is different from usual circumstances but appropriate to the situation. Emergency medical services in the United States are provided through a complex system composed of highly variable organizational structures. The variability of EMS response systems is further exacerbated by important differences in EMS preparedness training, guidelines, and response capacity – posing significant coordination and communications challenges for EMS leaders and planners. The U.S. Dept. of Health and Human Resources, Agency for Healthcare Research and Quality, has published a guide, *Mass Medical Care with Scarce Resources*⁶ to address these situations and present planners with approaches and strategies that would enable them to provide the most appropriate standards of care possible under the circumstances of an MCE. It will serve as a guide for EMS disaster responders pursuant to the AMR/FEMA Contract.

EMS in an MCE: Expected Shortages and Needs

In the case of an MCE, many health care resources at the local and regional levels will be overwhelmed or eliminated. Those EMS response agencies that are able to remain operational likely will encounter a demand for services that will outstrip the supply and available resources. EMS systems will confront:

- Personnel shortages.
- Breakdowns in supply chains.
- Lack of coordination and information sharing among diverse EMS providers, public safety, hospitals, trauma center, and public health.
- Breakdown of logistic support for operational sustainability, including such things as fuel shortages; inadequate availability of transport vehicles; and shortages in supplies, equipment, and pharmaceuticals.
- Overloading of hospital emergency departments and associated services such as intensive care capabilities; specialty services such as burn care or decontamination units; and specialized equipment such as ventilators, PPE, or negative pressure rooms.
- Breakdowns in local “burden sharing” strategies (mutual aid agreements) due to overwhelming demand and lack of surge capacity.
- The need to implement modified treatment protocols to meet the extraordinary conditions of the MCE that may be limited to reasonable life-sustaining activities where appropriate.

Approaches to the Allocation of Scarce Resources

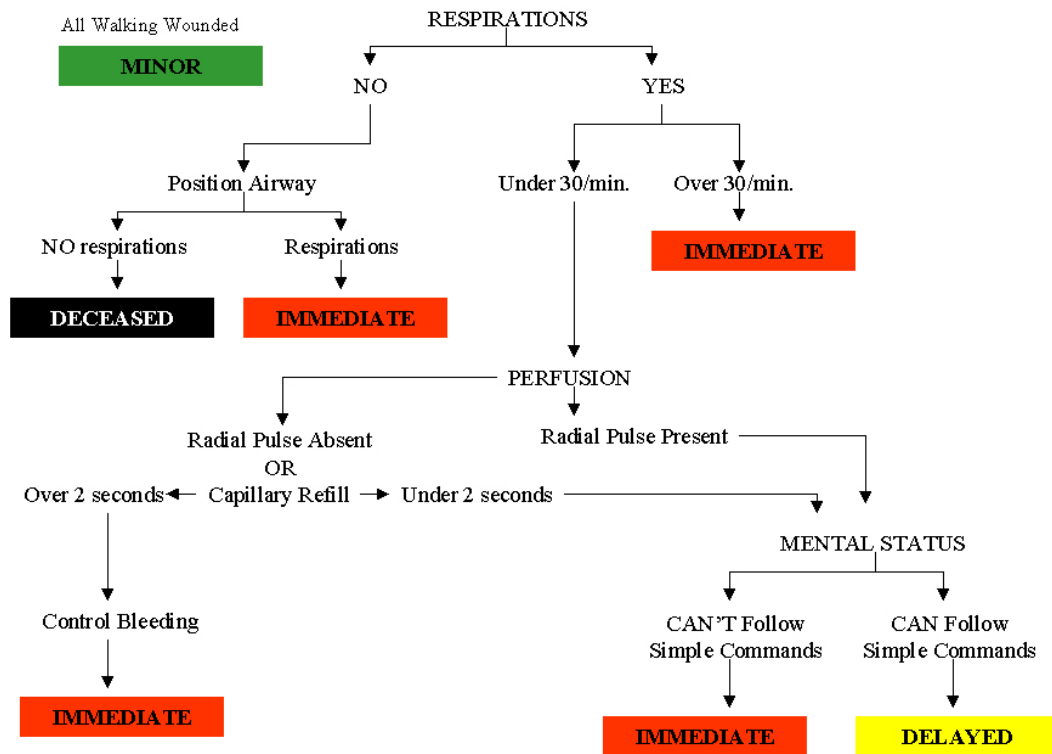
In the face of a catastrophic MCE, there likely will be scarcities and mismatches regarding EMS personnel, transport capacity, and destination availabilities for patient treatment. As a result, creative strategies will need to be implemented for coordinating and maximizing the use of available staff members and resources. Approaches to the allocation of scarce resources to be considered should include, but not be limited to, the following:

- **MAXIMIZE THE AVAILABILITY OF EMS PERSONNEL** through modified or extended shifts, deployment of no more than two providers per vehicle, and use of one-person response vehicles for “patient evaluation” prior to dispatch of transport resources.
- **MAXIMIZE THE USE OF AVAILABLE EMS PERSONNEL.** Some medical protocols may be suspended (e.g., base contact for certain interventions) to allow for greater efficiency and flexibility in patient management. EMS personnel may be used in nontraditional settings (e.g., alternative care sites, hospitals, pharmaceutical distribution centers) for field triage, treatment, or transport. Their scope of practice may be extended to provide vaccinations or medications or to deliver nontraditional medical care at the scene or in the home.
- **COMMUNITY EMERGENCY RESPONSE TEAMS (CERTS)⁷.** The CERTs program educates people on disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.
- **MAXIMIZE PERSONAL PROTECTION FOR PERSONNEL.** Universal precautions should be used for every patient encounter, if at all possible. To minimize the number of responders

exposed to pathogens or chemicals, specialized protections should be used to the extent possible and adjusted to the nature of the incident (e.g., distribution of antibiotics, vaccines, or antidotes to staff and family members). In the case of chemical incidents, decontamination needs must be evaluated and addressed prior to transportation to preserve transport capability. Similarly, security personnel should be assigned to protect EMS response operations, logistics centers, and stockpile depots.

- MAXIMIZE PATIENT TRIAGE AND EVALUATION.** Specific triage systems should be in place prior to an incident, and personnel should be trained and exercised in their use. Examples of triage systems include the START⁸ and JUMPSTART⁹ triage systems. START is an acronym for Simple Triage and Rapid Treatment and is a method that EMS responders use to effectively and efficiently evaluate victims during a MCE. The whole evaluation process is generally conducted in 60 seconds or less. Once the evaluation is complete, the victims are labeled with one of the four triage categories.
 - GREEN: Minor delayed care** / can delay up to three hours
 - YELLOW: Delayed urgent care** / can delay up to one hour
 - RED: Immediate care** / life-threatening
 - BLACK: Deceased** victim is dead or mortally wounded / no care required

S.T.A.R.T Flowchart



- **MAXIMIZE TRANSPORT CAPABILITY.** Public and private ambulance services should be coordinated and steps taken to ensure that they do not self-dispatch to MCEs. Paramedic-initiated alternative transport mechanisms also should be put into place (e.g., buses, taxis, privately owned vehicles). Mutual aid agreements should be in place and implemented to deploy and use available transportation assets, staff members, and staging locations. Transport assets should be loaded to their full capacity and patients taken to the closest appropriate hospital or care site. Air transport should be used to take patients to distant facilities (unless the incident presents contamination risks). Noncritical calls should be batched by geographic area. Bypass, diversion, or closure rules could be suspended to promote equitable distribution of patients and to try to avoid the overloading of any one hospital. Secondary transport needs should be anticipated so that patients can be transferred from overloaded hospitals or care sites to those that are less affected. Ambulances and para-transit vehicles should avoid transporting patients to far destinations because it is anticipated they will be needed for multiple round trips.
- **MAXIMIZE DESTINATION CHOICES.** A centralized coordination of patient transport should be in place to minimize hospital overloading and maximize the use of other available resources, such as primary care providers, alternative care sites, medical evaluation centers, or triage centers.

Indeed, it is likely that the vast majority of victims of an MCE may end up being most appropriately managed in the home setting, either because their illness or injury is not severe enough to warrant institutionalized care or because the successful outcome of such inpatient treatment in the setting of scarce and limited resources would be considered futile and potentially wasteful.

Many view the community hospital as a “safe haven,” a place to go for food, shelter, protection, and medical attention. However, particularly in the event of a transmissible infectious disease in which hospitalized patients represent the sickest patients in the community, the concept of “safe haven” may not be applicable. In fact, it may be more dangerous to be in the hospital setting than to remain at home. It is important for community planners to highlight the concept of the home as a “safe haven” in their risk communication strategies and develop measures to support this concept. Emergency planners, therefore, must incorporate the likelihood of home care delivery in all aspects of their planning efforts. This planning must focus on the possibility that some rudimentary degree of medical care will need to be delivered in the home setting, often with limited outside professional assistance.

Mass Evacuation Transportation

The National Response Framework (NRF) assumes that up to 100,000 patients and evacuees may require transport, regulating, and tracking during a catastrophic incident. It is important to estimate the transportation resources needed to evacuate patients and evacuees from healthcare facilities and other locations. The Agency for Healthcare Research and Quality has created a *Mass Evacuation Transportation Model*¹⁰ that estimates the time required to evacuate patients from healthcare facilities and transport them to receiving facilities. The model considers the transportation requirements of different types of patients (for example ambulatory patients or patients requiring constant medical attention during the evacuation); the availability of ambulances, wheelchair vans, and buses; the location of evacuating and receiving facilities; and the surge capacity of receiving facilities.

Unsolicited Medical Personnel Volunteering at Disaster Scenes

AMR prohibits self-deployment in response to the AMR/FEMA National Ambulance Contract. Only those personnel who are officially authorized and credentialed by AMR may respond pursuant to a FEMA deployment. Furthermore, AMR concurs with the position statement of ACEP and NAEMSP regarding unsolicited medical personnel.

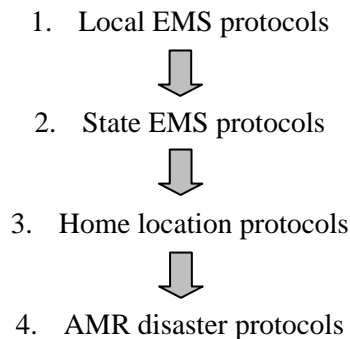
“The American College of Emergency Physicians (ACEP) and the National Association of EMS Physicians (NAEMSP) believe an organized approach is needed for the utilization of unsolicited medical personnel who volunteer to respond to disaster scenes or mass casualty incidents. To ensure the efficient, effective, and safe mobilization of such volunteer medical resources, medical command must come under the authority of the medical director for the emergency medical services (EMS) system and the jurisdiction's established incident command system (ICS). This practice will ensure the integration of all medical functions in the area and accountability under the jurisdiction's established (ICS) without hampering authorized and established functioning rescue efforts.

Volunteer medical personnel (e.g., physicians, nurses, emergency medical technicians, etc.) should not respond to a disaster scene unless officially requested by the jurisdiction's established ICS. All personnel must understand the authority and resources of local EMS and health care systems, the importance of staffing their facilities as their primary responsibility, and the dangerous conditions associated with on-site operations.”¹¹

Disaster Clinical Protocols

EMS responders who are deployed pursuant to the AMR/FEMA National Contract shall follow the local clinical protocols in effect for the disaster area. If local EMS protocols are otherwise unavailable, disaster responders should follow state EMS protocols for the disaster-affected state, if they exist. If state protocols are unavailable, disaster responders should follow the protocols from their home location, i.e., the protocols they use back home in daily practice in non-disaster times. As a last resort, if the above options are unavailable, AMR will provide protocols to be used by its disaster responders. In any case, at no time should any EMS provider perform procedures that are beyond their scope of formal training and certification, regardless of the protocols in place. The following flowchart summarizes this hierarchy.

DISASTER CLINICAL PROTOCOLS FLOWCHART

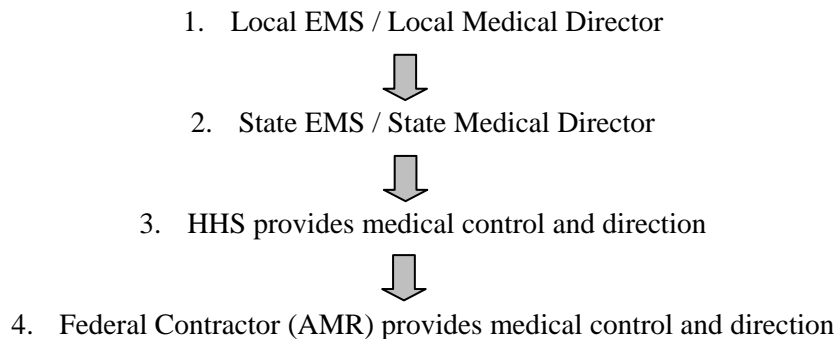


Medical Control and Direction During Disasters

Because the medical control of emergency medical services is within the domain of emergency medicine, it remains the responsibility of emergency physicians to provide both direct patient care and medical control of out-of-hospital emergency medical services during disasters.¹²

EMS responders who are deployed pursuant to the AMR/FEMA National Ambulance Contract shall follow medical control and direction of the local EMS jurisdiction if available. If local medical control is unavailable, EMS disaster responders shall follow medical control and direction from the authorized medical director of the disaster-affected state. If that is unavailable, the national ESF8 primary agency, U.S. Dept. of Health and Human Services or their delegate(s) shall provide medical control and direction. If that is unavailable, and as a last resort, the official AMR medical liaison assigned to the disaster shall provide medical control and direction. The following flowchart summarizes this hierarchy.

Medical Control and Direction During Disasters



- ¹ National EMS Core Content. National Highway Traffic Safety Administration. DOT HS 809 898. July 2005.
<http://www.nhtsa.gov/people/injury/ems/EMSCoreContent/index.htm>
- ² National EMS Scope of Practice Model. National Highway Traffic Safety Administration. DOT HS 810 657. February 2007.
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- ³ Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report. Institute of Medicine of the National Academies. ISBN: 0-309-14431-0. 2009.
<http://www.nap.edu/catalog/12749.html>
- ⁴ Altered Standards of Care in Mass Casualty Events. Bioterrorism and Other Public Health Emergencies. Agency for Healthcare Research and Quality, U.S. Dept. of Health and Human Services. AHRQ Publication No. 05-0043. April 2005.
<http://www.ahrq.gov/research/altstand/>
- ⁵ Mass Medical Care with Scarce Resources: The Essentials (Includes Chapter on Influenza Pandemic Preparedness). U.S. Dept. of Health and Human Services, Agency for Healthcare Research and Quality. AHRQ Pub. No. 09-0016. Sept. 2009.
<http://www.ahrq.gov/prep/mccessentials/mccessent.pdf>
- ⁶ Mass Medical Care with Scarce Resources, A Community Planning Guide. U.S. Dept. of Health and Human Services, Agency for Healthcare Research and Quality. Prepared by Health Systems Research, Inc. AHRQ Publication No. 07-0001. February 2007.
<http://www.ahrq.gov/research/mce/>
- ⁷ CERT. The National Office of Citizen Corps – FEMA Individual and Community Preparedness Division.
<http://www.citizencorps.gov/cert/about.shtm>
- ⁸ START Support Services. Newport Beach Fire Department. Newport Beach CA.
<http://www.start-triage.com/index.html>
- ⁹ JumpSTART Pediatric MCI Triage Tool. Lou E. Romig MD, FAAP, FACEP. Team Life Support Inc.
<http://www.jumpstarttriage.com/>
- ¹⁰ Mass Evacuation Transportation Model. Agency for Healthcare Research and Quality. U.S. Dept. of Health and Human Services. AHRQ Publication No. 08-0102-1-EF. August 2008.
<http://www.ahrq.gov/prep/massevac/manual/massevum1.htm>
- ¹¹ Unsolicited Medical Personnel Volunteering at Disaster Scenes. Policy Statement - American College of Emergency Physicians Board of Directors, June 2002.
<http://www.acep.org/practres.aspx?id=29842>
- ¹² Disaster Medical Services. Policy Statement - American College of Emergency Physicians Board of Directors, 1985, 1997, 2000, 2006.
<http://www.acep.org/practres.aspx?id=29176>