

POSITION PAPER

NATIONAL ASSOCIATION OF EMS PHYSICIANS

MASS GATHERING MEDICAL CARE

David Jaslow, MD, MPH, Arthur Yancy II, MD, MPH, Andrew Milsten, MD, for the National Association of EMS Physicians Standards and Clinical Practice Committee

A medical action plan must be created and enacted for every mass gathering event to ensure that timely and appropriate emergency medical care is available to all spectators and participants. Such a plan must adhere to all local, regional, and state regulations regarding mass gathering event planning and must be endorsed and approved by the event emergency medical services (EMS) coordinator and the event EMS medical director. A medical action plan must be comprehensive and proactive in nature and will address the following 15 components:

- Physician medical oversight
- Medical reconnaissance
- Negotiations for event medical services
- Level of care
- Human resources
- Medical equipment
- Treatment facilities
- Transportation resources
- Public health elements
- Access to care
- Emergency medical operations
- Communications
- Command and control
- Documentation
- Continuous quality improvement

Mass gathering medical care refers to organized emergency health services provided for spectators and participants at events in which at least 1,000 persons are gathered at a specific location for a defined period of time.¹ An exact numerical and temporal definition of the term has yet to be agreed upon in the literature and is likely to vary around the United States. The delivery of emergency medical care at mass gathering events is uniquely challenging in several ways. Emergency medical services personnel must navigate large crowds of people who may be densely packed into self-contained clusters or who may be located in discontinuous areas without clear landmarks. Frequently, barriers to access prevent the use of motorized transport vehicles for ingress to or egress from the region in which the patient is located. Environmental factors, such as weather, can impact upon the patient's illness and can contribute to large numbers of ill patients

within a short time span. Failures of communications systems and a lack of available resources may lead to delays in patient access during mass gathering events. Increasingly, the concern for terrorist incidents and multiple casualty events at large public gatherings has caused EMS planners to rethink their human resource and equipment deployment strategies to better prepare for a catastrophe. In summary, the typical mass gathering event medical emergency, while still likely to be a common problem, may present itself in a fashion quite different from what most EMS providers are used to encountering in their communities.

Emergency medical care has been provided at such events in the United States for at least the last 30 years.² A review of the medical literature indicates that the sophistication of the delivery systems for this care has improved dramatically since the 1960s, when volunteer physicians and other health care professionals assisted demonstrators at large anti-war demonstrations and outdoor concerts. However, only select events have been described in the literature. These events were located in urban areas with large population centers or involved very sizable populations and detailed event planning.

Despite a volume of literature that numbers over 100 articles, there is no uniformity or standardization of mass gathering medical care at different venues across the country. Many case reports exist

Dr. Jaslow is in the Division of Emergency Medicine, Temple University, Philadelphia, Pennsylvania; Dr. Yancy is in the Department of Emergency Medicine, Emory University, Atlanta, Georgia; and Dr. Milsten is in the Division of Emergency Medicine, University of Maryland, Baltimore, Maryland.

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Address correspondence and reprint requests to: David Jaslow, MD, MPH, Temple University Division of Emergency Medicine, 3401 North Broad Street, Philadelphia, PA 19140. e-mail: <djaslow@nimbus.ocis.temple.edu>.

that describe preparations for patient care as well as the numbers and types of patients encountered at a few of the larger or more high-profile events in the last three decades. However, the vast majority of mass gathering events have never been evaluated from the standpoint of the adequacy of delivery of emergency health services. Nor has there been any significant scientific review of variables or characteristics related to patient generation at mass gathering events. Not surprisingly, a recent review of state legislation on mass gathering medical care regulations produced only six examples nationwide.³

While various authors of the mass gathering medical care literature have discussed proper planning and response to these events, only the American College of Emergency Physicians has published an official guide for those planning the delivery of emergency health care in these settings.⁴ This document was a milestone when it first appeared in 1990. Currently, there are additional components that should be included in a comprehensive document on this issue. Development of this comprehensive document that provides guidance for all elements of planning for emergency medical care at a mass gathering event is the goal of the National Association of EMS Physicians document, *Mass Gathering Medical Care: The Medical Director's Checklist*.

Although there may be significant variation in the specific approaches to EMS delivery at large events, there is a need to define minimum standards for the delivery of such care that should be met by all event sponsors and

event EMS coordinators, regardless of geographic location, event size, or resource availability. The medical director of a mass gathering event is responsible for ensuring that the provision of emergency medical care meets or exceeds the standard of care for the surrounding community. Additionally, he or she must lay the foundation of understanding and agreement with event managers, venue owners, and the event EMS coordinator regarding the planning and execution of a successful emergency medical operation. The discussion with event managers and/or venue owners should result in an agreement covering the elements listed in this document. Its form should be contractual and its contents specifically detailed on paper due to the risk management and medicolegal implications of the anticipated duties.

There is a significant lack of scientific evidence to substantiate many of the points included in this document. Since there are no prospective studies in the mass gathering literature, the points highlighted in this position paper are derived from application of a systems approach to mass gathering event medical care. The systems approach espouses a "whole is greater than the sum of its parts" philosophy. Thus, the delivery of emergency medical care at a mass gathering event is dependent on coordinating the complex interrelationships of a number of functional components and attention to detail among many operational sections.

The centerpiece of this effective medical response is the medical action plan, a blueprint for the delivery of emergency medical care. It contains a compilation of

subplans, each of which addresses a distinct facet of medical care operations or administration. The primary mission behind development and execution of a medical action plan is to ensure that important goals and objectives related to the delivery of emergency medical care would be met.

The basic building blocks of a medical action plan are presented in "the checklist." They are listed in chronological order beginning with elements that must be addressed in the weeks to months prior to a planned event. These points are meant to serve as a guideline to aid in the effective planning of emergency medical care delivery. A detailed description of each subcomponent of the medical action plan, a brief synopsis of each individual section, and a list of pertinent peer-reviewed journal articles may be found in *Mass Gathering Medical Care: The Medical Director's Checklist*, which is available through the NAEMSP office.

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