

Mass Gathering Medical Planning

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Disclaimers/Disclosures

- ▶ Presentation is based on the National Association of EMS Physicians: Mass Gathering Medical Care Planning-The Medical Sector Checklist, 2017
 - ▶ Served as a reviewer of the document
- ▶ Presentation references the requirements for Special Event EMS Coverage contained within the proposed update to DHS 110, which is currently in draft form at the time of this presentation was developed.
 - ▶ Section numbers are approximate
 - ▶ Served on the DHS 110 Update Committee

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Unique Aspects to EMS for Mass Gatherings

- ▶ Large numbers of people densely packed into clusters
- ▶ Discontinuous areas without clear landmarks
- ▶ Physical barriers to accessing patients and use of motorized transport vehicles for ingress/egress
- ▶ Communication barriers related to cell tower saturation
- ▶ Additional command and control structures
- ▶ Environmental factors can lead to large numbers of patients within a short time span
- ▶ Increase concerns for terrorist incidents and multiple casualty events at large public gatherings

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Mass Gathering Medical Planning

- ▶ “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 issues”
- ▶ Effective EMS planning for mass gathering event should ideally culminate in the development of a Medical Action Plan

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Medical Action Plan

- ▶ Purpose: Outline specific details about the organization and delivery of emergency medical care at a mass gathering event
 - ▶ Based upon a combination
 - ▶ Experience with care at previous events
 - ▶ Research of statistics from previous events of a similar nature and duration
 - ▶ Objective evidence about elements known to have influenced the delivery of emergency medical care at a given previous similar mass gathering event

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Medical Action Plan

- ▶ Factors influencing plan development
 - ▶ Jurisdictional regulations for EMS(DHS 110)
 - ▶ Local, regional or state guidelines addressing mass gatherings
 - ▶ Permit requirements in regards to notification and integration of public safety agencies vary greatly across the state
- ▶ Additional Factors for EMS Agencies
 - ▶ Amount of lead time for developing plan
 - ▶ Engagement of event organizer in medical action plan development
 - ▶ Is EMS serving as internal or external partner to the event?

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DHS 110.44-Proposed

- (1)** Name of the ambulance service provider or non-transporting emergency medical service requesting approval.
- (2)** Contact information for the event manager, including how to contact the ambulance service provider during the event.
- (3)** Locations, dates, and times of the event.
- (4)** Name, address, phone numbers, and e-mail addresses for each service medical director who will oversee the medical services at the event.
- (5)** Name and contact information for the medical consultation facility.
- (6)** The types of EMS services that will be provided.
- (7)** The level of EMS service that will be provided.
- (8)** The number of ambulances dedicated to the event including ambulance staffing configurations and types.

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DHS 110.44-Proposed

- (9)** Whether the service will be "dedicated services" or "as available" based on resources.
- (10)** Whether the special event coverage is for participants, spectators, or both.
- (11)** Description of on-site communications between the event manager, event staff, dispatch, and 9-1-1 dispatch.
- (12)** Explanation of how medical consultation will be contacted or if on-site medical consultation will be used.
- (13)** Any special patient care protocols for use at the event.
- (14)** Explanation of how EMS professionals will be notified and requested during the event.
- (15)** Explanation of how the ambulance service provider will integrate with the 9-1-1 system.
- (16)** Explanation of how a 9-1-1 request that is generated within the event by a participant or spectator will be handled.
- (17)** Identification of the service provider that will respond to a 9-1-1 call initiated from within the event.

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DHS 110.44-Proposed

- (20)** Written acknowledgement that the ambulance service provider requesting special event approval assumes all liability for ambulance coverage and response during the event.
- (21)** Copies of any agreement or contract for providing emergency medical services for the event.
- (22)** Written acknowledgement that the special event coverage will not interfere with its responsibility to provide 9-1-1 emergency response within its primary service area, if the ambulance service provider or non-transporting emergency medical service provider is also licensed as a 9-1-1 provider.

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DHS 110.44-Proposed

(23) If the special event coverage is for spectators and more than **5000 attendees** are anticipated to be in attendance, a mass casualty plan including:

- (a) Name and contact information of the ambulance service provider or public safety agency that shall be the lead agency in the event of a mass casualty incident.
- (b) A copy of the triage protocol to be used in the mass casualty incident.
- (c) A copy of the destination determination policy to be used in a mass casualty incident.
- (d) A list of destination hospitals including contact information.
- (e) Copies of any mutual aid agreements specific to the event.
- (f) A list of any specialty resources prepositioned for the event.
- (g) Written acknowledgement that the ambulance service has identified potential staging areas and landing zones near the event.
- (h) Written acknowledgement that the ambulance service provider or non-transporting emergency medical service provider has notified area hospitals of the date of the event.

(24) Other information as determined by the department

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Medical Action Plan

- ▶ A basic documented medical action plan should be created for every mass gathering event.
- ▶ The medical action plan should be the basis for the contractual agreement between the medical operations sector and the event sponsors/organizers/managers.
- ▶ Authorship of the medical action plan is the joint responsibility of the event medical operations staff and medical directors.
- ▶ The medical action plan must meet or exceed all local, regional and/or state guidelines for mass gathering event EMS planning, as well as meet the level of out-of-hospital emergency medical practice in the surrounding community.

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DHS 110.44

- ▶ **(1)** Name of the ambulance service provider or non-transporting emergency medical service requesting approval.
- ▶ **(2)** Contact information for the event manager, including how to contact the ambulance service provider during the event.
- ▶ **(3)** Locations, dates, and times of the event.
- ▶ **(4)** Name, address, phone numbers, and e-mail addresses for each service medical director who will oversee the medical services at the event.
- ▶ **(21)** Copies of any agreement or contract for providing emergency medical services for the event.

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Medical Action Plan

- ▶ **If requested, copies of the medical action plan must be forwarded to all local, regional, state and federal officials who hold responsible roles in supporting the mass gathering event, even when medical action plans are not part of the jurisdictional permitting process.**
 - ▶ **Should also be shared with Hospitals, HERC, etc**
- ▶ A copy of the medical action plan should be on-site and available to all EMS personnel at the mass gathering event

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DHS 110.44

- ▶ **(23)** If the special event coverage is for spectators and more than 5000 attendees are anticipated to be in attendance, a mass casualty plan including:
 - ▶ (d) A list of destination hospitals including contact information.
 - ▶ (h) Written acknowledgement that the ambulance service provider or non-transporting emergency medical service provider has notified area hospitals of the date of the event.

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Medical Action Plan

- ▶ The medical action plan should be designed or reviewed, and approved by the event medical director or the medical director of the EMS agency primarily responsible for delivery of emergency medical care in the jurisdiction of the event.
- ▶ The medical action plan should include/address the Medical Sector Checklist items
- ▶ The medical action plan should be completed at least 30 days prior to the mass gathering event
- ▶ The medical action plan should be distributed to, and reviewed with all internal and external participating/responsible personnel prior to the mass gathering event

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NAEMSP: Mass Gathering Medical Care Planning-The Medical Sector Checklist

Sections

- ▶ Provisions for physician Medical Oversight and operational support
- ▶ Venue and Event Analysis
- ▶ Negotiations for Event Medical Services
- ▶ Level(s) of Care
- ▶ Treatment Facilities
- ▶ Transportation Resources
- ▶ Public Health
- ▶ Access to Care
- ▶ Emergency Medical Operations
- ▶ MCI and Disaster Planning
- ▶ Communications
- ▶ Documentation
- ▶ CQI

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Physician Medical Oversight and Operational Support

- ▶ Physician medical oversight must exist for every mass gathering event with considerations for direct and indirect medical oversight functions applicable and unique to each mass gathering event.
- ▶ Plans must ensure that EMS providers have appropriate medical and operational supervision and/or guidance from a medical director to safeguard delivery of appropriate standardized emergency medical care

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Physician Medical Oversight and Operational Support

- ▶ EMS and other healthcare personnel require state licenses or defined exceptions in order to practice within the state
- ▶ EMS Practitioners require physician oversight and credentialing

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Physician Medical Oversight and Operational Support

- ▶ Medical staff traveling with touring events are often NOT licensed in WI and therefore cannot operate at their license level

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- ▶ **(4)** Name, address, phone numbers, and e-mail addresses for each service medical director who will oversee the medical services at the event.
- ▶ **(5)** Name and contact information for the medical consultation facility.
- ▶ **(12)** Explanation of how medical consultation will be contacted or if on-site medical consultation will be used.
- ▶ **(13)** Any special patient care protocols for use at the event.

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Venue Analysis

- ▶ Venue location, in relationship to destination hospitals and local EMS resources
- ▶ Venue characteristics that affect access to care and ease of evacuation
 - ▶ Patient access factors and limitations
 - ▶ Egress limitations both within venues and within community

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Event Analysis

- ▶ Expected attendance
 - ▶ Demographics: Participant and Spectator
 - ▶ Age ranges
 - ▶ Health status
 - ▶ Local versus visiting populations
 - ▶ Extent of participation: i.e. rock concert versus polka festival versus marathon
- ▶ Demands/Needs for medical care of sub-groups (performers, spectators, VIP's)
- ▶ Expected weather conditions and seasonal climate

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Venue and Event Analysis

- ▶ Risk for violence, estimated from previous similar events
- ▶ Use and intra-venue access to alcohol and illicit drug
- ▶ Availability and safety of, and ease of access to food, water and shelter

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Venue and Event Analysis

- ▶ Scope, Duration, Geographic area of event
 - ▶ Single day event versus multi-day
 - ▶ On-site versus Off-site accommodations
 - ▶ Medical coverage for core event versus comprehensive coverage

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Venue and Event Analysis

- ▶ Data from previous similar events including:
 - ▶ Patient Presentation Rate. Number of patient encounters divided by number of persons at event then standardized to per 1,000 or similar factor
 - ▶ Transport to Hospital Rate: Number of patient transport divided by number of persons at event then standardized to per 1,000 or similar factor
 - ▶ After action reports

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- ▶ **(9)** Whether the service will be “dedicated services” or “as available” based on resources.
- ▶ **(10)** Whether the special event coverage is for participants, spectators, or both.
- ▶ **(20)** Written acknowledgement that the ambulance service provider requesting special event approval assumes all liability for ambulance coverage and response during the event.

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Negotiations for Event Medical Services

- ▶ Scope and responsibility for emergency medical care must be clarified and agreed upon.
- ▶ Liability insurance coverage for all EMS personnel must be addressed
- ▶ The number and type of medical personnel that are desirable, critical, and possible for event must be reviewed and determined
- ▶ Medical personnel command and control structure within event and interfaces with jurisdictional EMS, public safety, public health must be determined

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Negotiations for Event Medical Services

- ▶ A contractual agreements to delegate responsibility for the delivery of event emergency medical care to an appropriate EMS service, agency, or authority
- ▶ Compensation status for all medical personnel must be addressed

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- ▶ **(6)**The types of EMS services that will be provided.
- ▶ **(7)**The level of EMS service that will be provided.
- ▶ **(8)**The number of ambulances dedicated to the event including ambulance staffing configurations and types.
- ▶ **(9)**Whether the service will be "dedicated services" or "as available" based on resources.
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- ▶ **(21)**Copies of any agreement or contract for providing emergency medical services for the event.

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Level(s) of Care

- ▶ Level of care for event should be at least the level of the surrounding jurisdiction
 - ▶ If providing care at a level below that of the surrounding jurisdiction, rationale and detailed plan for interface with jurisdictional EMS need to be documented
- ▶ Goal: EMS able to provide early defibrillation capability for anyone within the venue to meet a collapse-to-shock goal of 5 minutes or less

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Level(s) of Care

- ▶ Determine the need for education/training of EMS providers regarding medical protocols and/or procedures specific to the actual event
 - ▶ Increased number of environmental emergencies
 - ▶ Unique injury/illness patterns
 - ▶ Illicit drug use impacts
- ▶ Protocols for treated and released, either appropriately or against medical advice
- ▶ Joint Medical and Event Policy for the evaluation and/or treatment of minors without a parent or legal guardian present

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Minors without a parent or legal guardian present

- ▶ Primary concern: Teenagers needing onsite evaluation and treatment but not needing transport for additional evaluation
 - ▶ Able to consent to treatment but unclear on ability to be released without parental consent
 - ▶ Potential for overwhelming EMS/ED because unable to release teenage minors on scene

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Treatment Facilities

- ▶ Determine type and scope of on-site treatment facilities
 - ▶ First Aid/Initial Care Only
 - ▶ Moderate Complex Treatments/Observation
 - ▶ IV hydration
 - ▶ Antiemetics
 - ▶ Sutures, minor surgical procedures
 - ▶ Comprehensive Evaluation
 - ▶ EKG
 - ▶ Labs
 - ▶ Moderate Duration Observation
 - ▶ Sobering tents

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Treatment Facilities

- ▶ Determine capability of off-site treatment facilities to handle the expected patient load, including specialty patients, such as critical trauma, Stroke, STEMI, eye injuries, mental illness, and hazardous materials exposure patients
- ▶ Potential receiving hospitals must be notified of the event prior to its occurrence
- ▶ During a multi-casualty incident, all attempts must be made to appropriately and efficiently distribute casualties to multiple hospitals in order to prevent “overload”

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- ▶ **(23)** If the special event coverage is for spectators and more than 5000 attendees are anticipated to be in attendance, a mass casualty plan including:
 - ▶ (c) A copy of the destination determination policy to be used in a mass casualty incident.
 - ▶ (d) A list of destination hospitals including contact information.
 - ▶ (h) Written acknowledgement that the ambulance service provider or non-transporting emergency medical service provider has notified area hospitals of the date of the event.

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Transportation Resources

- ▶ A basic transportation plan must contain at a minimum, the number of and medical crew capabilities (BLS vs ALS) of ambulances deployed, type and number of non-emergency transport vehicles, and staging locations for all transportation resources
- ▶ Plan needs to include how and where additional transportation resources will be obtained if needed (mutual aid)
- ▶ Plan should consider expected Transport to Hospital Rate
- ▶ Appropriate utilization of air medical resources should be reviewed prior to event
 - ▶ A dedicated landing zone must be established and secured if air medical resources are anticipated to be used during an event

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Public Health Elements

- ▶ EMS's responsibilities for public health aspects of event should be delineated
- ▶ Coordination and interface with jurisdictional public health should also be delineated
- ▶ **Ability for two-way information exchange to evaluate for trends suggesting underlying issues**
 - ▶ **GI: Foodborne illness, lack of sanitation, etc**
 - ▶ **Respiratory: Air contaminates, bio-chem attack**
 - ▶ **Drug Use trends**

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Access to Care

- ▶ Ensure all participants and spectators of event are aware of how to access care
 - ▶ Onsite care access
 - ▶ Resource Lists with directions for local hospital, urgent care, pharmacy
- ▶ Determine interface of onsite “dispatch” and jurisdictional dispatch system
- ▶ Ensure event staff are trained on how to activate onsite medical services and how to avoid premature activation of off-site EMS

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- ▶ **(11)** Description of on-site communications between the event manager, event staff, dispatch, and 9-1-1 dispatch.
- ▶ **(14)** Explanation of how EMS personnel will be notified and requested during the event.
- ▶ **(15)** Explanation of how the ambulance service provider will integrate with the 9-1-1 system.
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Emergency Medical Operations

- ▶ The scope, duration, geographic coverage area of emergency medical care to be delivered must be clearly defined and agreed upon
- ▶ Goal: Deliver early CPR and defibrillation to victims of sudden cardiac death within 5 minutes from the time of collapse, based on planning placement of resources and personnel no more than 5 minutes away from anyone within the venue
- ▶ **Planning must include the possibility of an MCI or disaster during mass gathering events and specifically address the most likely types of disasters at mass gatherings, environmental (weather) disasters, technological disasters, and man-made disasters.**

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- ▶ **(23)** If the special event coverage is for spectators and more than 5000 attendees are anticipated to be in attendance, a mass casualty plan

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MCI and Disaster Planning

- ▶ Such planning should specifically address the most likely types of disasters at mass gatherings, e.g., environmental (weather) disasters, technological disasters, and manmade disasters.
- ▶ EMS personnel must be aware of the procedures regarding disaster operations, including medical protocols and other operational guidelines.
- ▶ All medical personnel must be assigned contingent MCI roles prior to the beginning of the event.
- ▶ MCI roles should be based upon the jurisdictional emergency management agency's MCI plan, and be consistent with the National Incident Management System (NIMS) and Incident Command System.

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Communications

- ▶ Plans must include
 - ▶ designated radio frequencies
 - ▶ cell numbers of supervisory medical personnel
 - ▶ Methods for non-medical personnel to alert medical personnel to the presence of a medical emergency
- ▶ Plan must be compatible with communications protocols of jurisdictional emergency services
- ▶ EMS must be able to communicate with the following resource and personnel by radio, cell phone and/or landline:
 - ▶ Venue administrators (Security, Facility Maintenance, Public Address System)
 - ▶ Event manager(s)
 - ▶ Public safety answering point (PSAP) for the jurisdiction
 - ▶ Emergency operations center (EOC) for the jurisdiction
 - ▶ Public health for the jurisdiction
 - ▶ Leadership at acute care (destination) institutions to which patients are likely to be transported

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- ▶ **(2)** Contact information for the event manager, including how to contact the ambulance service provider during the event.
- ▶ **(4)** Name, address, phone numbers, and e-mail addresses for each service medical director who will oversee the medical services at the event.
- ▶ **(5)** Name and contact information for the medical consultation facility.
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Resources

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- ▶ ASPR Technical Resources, Assistance Center, and Information Exchange (TRACIE) (asprtracie.hhs.gov) [<https://asprtracie.hhs.gov/technical-resources/85/Mass-Gatherings-Special-Events>]