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# Planning Medical Care for High-Risk Mass Gatherings

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## Abstract

Humans, being social people, have many reasons to engage in mass gatherings, from sports events and fairs to festivals and concerts. Once the number of people in attendance reaches a certain number the local EMS will be unable to provide adequate coverage without making specific plans. In addition, some of these gatherings carry the risk of becoming a mass casualty incident under certain conditions such as an outdoor event during very hot weather.

An unfortunate fact of modern life is the existence of terrorists, either in groups or individuals. They may view a mass gathering as an opportunity to make a statement by setting off a bomb or by release of a toxic substance.

The type of mass gathering which is at most risk for a terrorist attack is one that has in attendance a national or international politician or dignitary. These events are also at risk for an assassination attempt, as well as the use of explosive devices.

These events will have the presence of security personnel such as the Secret Service or Diplomatic Security Service who will have intense security requirements which may be unfamiliar to many EMS services.

These mass gatherings still require EMS coverage and their plans for these events will need to be coordinated with and conform to the security service in attendance.

This article outlines the security requirements for such events that will require changes in EMS coverage from "ordinary" mass gatherings.

## INTRODUCTION

The provision of medical care for mass gatherings requires coordination and planning that includes fire, police, and EMS services. The many parameters involved in such planning are dependent upon the specific type of mass gathering and are discussed in detail in the articles by Leonard<sup>1,2</sup>.

Most mass gatherings do not present any special risk to the health and safety of the participants. Some, however, are more likely than others to produce situations that can lead to physical danger or health risks to the attendees. These types of mass gatherings can be grouped into those with an "internal" risk and those with an "external" risk.

### INTERNAL RISK MASS GATHERINGS

The most common mass gathering in this category are those at which attendees have access to or possession of large amounts of alcohol and/or illegal drugs. Both the medical

effects of these substances as well as their effects on behavior can lead to many medical problems.

Large gatherings held during very hot weather, particularly if water and shade are in short supply, can lead to multiple victims of heat illness and can easily produce a mass casualty incident.

Protest rallies or meetings of politically inflammatory groups can easily produce fights, stabbings, and shootings if not carefully controlled by police.

### EXTERNAL RISK MASS GATHERINGS

The most important event in this category is the subject of this article and that is a mass gathering that has in attendance a national or international politician or dignitary.

Unfortunately, the presence of such a person attracts terrorists, either a single person or a group. Terrorists foresee this event as an opportunity to make a statement, either by

assassination, explosion, or the release of a toxic substance.

Therefore, the provision of EMS services for such a mass gathering has two aspects that are not found in “ordinary” mass gatherings:

- (a) EMS services dedicated to the dignitary(s); and
- (b) Readiness for a mass-casualty incident.

These services must be provided within a framework of security that is very intense and conforms to requirements unfamiliar to many EMS services.

These type of mass gatherings will be referred to as “high risk mass gatherings”.

### **TERRORISM IN THE UNITED STATES**

There is no single, universally-accepted, definition of terrorism. Terrorism is defined in the Code of Federal Regulations as “... the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.” (28. C.F.R. Section 0.85)

The FBI divides terrorist-related activity into three categories:

1. A terrorist incident is a violent act or an act dangerous to human life, in violation of the criminal laws of the United States, or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof.
2. A suspected terrorist incident is a potential act of terrorism in which responsibility cannot be attributed at the time to a known or suspected terrorist group or individual.
3. A terrorism prevention is a documented instance in which a violent act by a known or suspected terrorist group or individual with the means and a proven propensity for violence is successfully interdicted through investigative activity.

An individual terrorist or a group of terrorists must make some public statement or undertake an attempt at a terrorist act in order to attract the attention of the FBI. Another group of “bad guys” who essentially go undetected until they carry out a violent act are the “loners”. These individuals, many of which have been in the news for their work-place shootings,

cannot be identified before their act.

### **SECURITY SERVICES**

The actual protection of the dignitary will be provided by either the Secret Service or the Diplomatic Security Service (DSS). The latter, also called the Bureau of Diplomatic Security, is an agency of the State Department.

The Secret Service provides protection for the president and vice president of the United States, as well as their immediate families. It also provides protection for ex-presidents for 10 years.

The Secret Service also provides protection for foreign heads of state such as prime ministers, presidents, kings, and queens.

The Diplomatic Security Service provides protection for the Secretary of State and American ambassadors as well as foreign ministers of state and foreign political figures at the cabinet level (Prince Charles of England would be protected by the DSS).

Foreign dignitaries will have their own security force who will coordinate their services with either the Secret Service or DSS.

### **ADVANCE PREPARATION**

The Secret Service and DSS will prepare in advance of their arrival in your community. These two services' requirements are similar and typically take place one week before the event. The President of The United States and foreign heads of state receive the highest level of security and preparation.

Some events, like the Olympics or the Republican/Democrat National Conventions will have planning processes that take a year or more to formulate.

Some jurisdictions have had frequent visits by national and international dignitaries in the past - their plans have already been formulated and would need only minor revisions. Other jurisdictions have never had such a visit and would need more intensive advance preparations.

### **DIGNITARY MEDICAL CARE**

The President and Vice-President of The United States have five physicians and a staff of nurses who provide personal care. One physician and a nurse travel with both the President and Vice-President wherever they go.

The Secret Service or the DSS will have already identified

the nearest Level 1 Trauma Center for their protectee. Part of their advance work will be to familiarize themselves with this facility and to make their needs known to the Emergency Department staff as well as the medical and surgical staff.

If a Level 1 Trauma Center is not in their jurisdiction, they will identify the nearest one available and determine how their protectee would be transported. Transport may be by a medical helicopter, which would be part of the advance work.

These plans are made whether their protectee is in the area for a short time or for a “remain over night” (a Secret Service term, or “RON”).

The interest of the Secret Service in a Level 1 Trauma Center is to be ready for their protectee if he suffers major trauma. Their protectee may, of course, suffer from some minor illness or trauma. For this reason, a person from the President/Vice-President's medical staff, usually the nurse, will also visit the nearest hospital as part of the advance work. The nurse will meet with the trauma nurse coordinator and other staff members in order to formulate plans for medical care other than major trauma.

A possible scenario might be that the protectee is a victim of major trauma in a jurisdiction without a Level 1 Trauma Center. In this case, the President/Vice-President's physician would decide if the protectee should be stabilized at a local facility before transport to the nearest designated Level 1 Trauma Center.

The President/Vice-President's physician has a federal medical license and can practice medicine in any state or U.S. territory. A foreign dignitary may have a personal physician, but the physician, being unfamiliar with local facilities and specialists, would not be able to write prescriptions or give medical orders in the United States. For this reason, a local physician (the EMS physician or Emergency Department attending) would help provide needed services in conjunction with the dignitary's personal physician.

If the dignitary (American or foreign) does not have a personal medical team then their advance team will need to make arrangements for medical problems and minor trauma. These plans should be done as part of the advance work at the trauma center.

Any member of the Secret Service or DSS who becomes ill

or injured receives the same medical care as any civilian. They would be taken to a local emergency department, by ambulance if necessary, or by one of their private vehicles.

## **REQUIREMENTS FOR EMS COVERAGE ARRIVAL OF DIGNITARY**

Most dignitaries will arrive at a local airport. The Secret Service will require an ALS unit to be in place when the protectee's airplane lands. The point-of-entry to the airport and stand-by location should be coordinated with the airport security/fire and rescue services.

### **1. Arrival of Dignitary**

A dignitary may arrive by motorcade from an outside jurisdiction in which case the EMS service would need to have an ALS unit join the motorcade at a pre-determined location.

### **2. The Motorcade and Dignitary Housing**

The Secret Service requires an ALS unit to travel with their motorcade during travel into and out of any jurisdiction as well as between sites.

EMS dispatchers should know the motorcade routes as well as the location of any facilities where a dignitary may be speaking or spending the night. The ALS unit with the motorcade is dedicated to the dignitary so if an event occurs, dispatch will have to send more units if needed. Since traffic is blocked for such motorcades, pre-planning should identify routes for easy access. The dedicated motorcade EMS unit should have an extra person whose job is to communicate with dispatch, since the crew members will be dedicated to emergency care for the dignitary.

The Secret Service also requires an ALS unit to be on-site at any location where their protectee is staying, whether the stay is for an evening or overnight.

EMS units and dispatch need code words for dignitaries and any facilities at which they may be staying. Giving real names and addresses over the radio would allow the news media to learn what is going on via scanners, (they all have scanners) which would complicate care if reporters descended upon the location.

## **SECURITY ZONE**

A function attended by a protectee of the Secret Service or DSS typically has three security zones or perimeters.

The outer perimeter, or “cold zone”, is open to the public,

but is under surveillance for any person or vehicle which may portend a threat, in which case it will be watched or investigated as needed.

The next security zone, or “warm zone”, will require some ID which gives access to this area. People who have legitimate reasons for entering but have no ID (i.e., food service trucks) must be accompanied by security personnel.

The inner zone, or “hot zone”, has the highest security level and is typically manned by personnel from the Secret Service or DSS. This zone requires the highest level of protection and typically an individual must have a special ID badge to enter this perimeter. The “hot” zone typically is the area within five hundred feet of the protectee.

A variation of this zone structure can have the outer perimeter, as mentioned above, with three security zones instead of two as described above.

The fire and EMS personnel need to have appropriate IDs that allow them access to all security areas.

Sometimes, different ID badges are required for each day. Emergency services need to coordinate the ID badges required by security before the event and should assign a person whose only task is to obtain and distribute the correct badges.

## **SECRET SERVICE, DSS, AND FBI**

As part of their advance work, the Secret Service or DSS will determine if any person or group in the area is a threat to their protectee. These activities will also be coordinated with the FBI, since they have the responsibility of tracking and investigating individual terrorists or terrorist groups. Their security plans and requests for EMS coverage will then be formulated.

If a terrorist act occurs, the Secret Service or DSS will remove their protectee (to a hospital if needed) after which the site becomes a crime scene under the jurisdiction of the FBI.

## **THE PLANS**

### **A. INTRODUCTION**

Provision of medical care for any mass gathering requires the formulation of plans that are subsequently put on paper. The planning process for high-risk mass gatherings will require many ingredients not found for other plans because of the presence of dignitaries and their security requirements.

Security services such as the Secret Service and the Diplomatic Security Service will evaluate the “threat level” for any given situation and make security plans accordingly.

The security advance work will include meeting with local fire, police, and EMS services and detailing their protectee's activities and the security requirements. Events which are held months after the advance work allow the preparation of elaborate plans. On the other hand, the desire of a protectee to visit an area on shorter notice won't allow the same level of planning, but certain ingredients will still be mandatory.

## **B. THE PLANNING BOOK**

Printed plans are essential for high-risk mass gatherings because of the high level of security required, the media representatives and security services from outside a particular jurisdiction, and the readiness required for acts of terrorism.

The planning books should be numbered and dated as well as having a page which denotes and dates any changes or revisions. These books should be considered to be secure documents and a list kept as to whom has which book.

We will now discuss the sections of the planning book which should be in place before the event. All people at the command post should have their own copy of the plans in front of them during the event.

### **1. CHRONOLOGY**

The first section should be the chronology of the event and which lists when the event opens to the public, the buildings/locations of the events, when the dignitary arrives, the times/locations of his speeches and meetings, the time the dignitary leaves, and when the event is actually over. This should take one or two pages and gives an easy-to-read outline of the entire event.

### **2. PERSONNEL**

The next section should delineate all people who will be physically in the command center or “Joint Operations Center” (JOC). Listings should include organization, the person's name, their position in the organization, their role in the mass gathering, their office phone number, their pager number, their cell phone number, and call sign/number (if they have one).

Who will be at the JOC will, of course, depend upon the specific event, what venues will be involved, and will include many, if not all, of the following:

FBI  
City Police  
Secret Service  
City/County Fire Department  
Diplomatic Protective Service  
County Emergency Management  
State Police  
City Emergency Management  
Sheriff  
U.S. Marshall's Service  
State Office of Emergency  
Emergency Medical Services  
Management  
Health Department

Other representatives should be present if their organization is part of the plan, such as:

Coliseum/Stadium Officials  
Public Works  
University Officials/Security  
Dept. of Transportation  
State National Guard  
Private Ambulance Services

Other services may not need to have a representative in the command post, but should have their information present in this section in case their services are urgently needed such as:

Haz Mat  
Heavy Rescue  
Search and Rescue  
Health Department

### **3. HOSPITALS/MEDIA**

The local hospitals should be listed including the administrator on call, the chief of professional services, and the Emergency Department. The latter usually has unlisted numbers which are important to know if the main numbers are busy. An event with many injuries may need the help of surrounding hospitals and emergency departments, so they should also have appropriate phone numbers listed (as well as being listed in the “Mutual Aid” section).

### **4. JOINT INFORMATION CENTER**

The media will have both local, national, and, very possibly, international personnel at the event. If something bad happens, it will be on the news in very short order. If the news media does not have access to correct information,

they will still put out a story – this may be deleterious to subsequent mitigation efforts. Accordingly, the news media should provide a contact person and their cell phone numbers so your information officer can make immediate contact.

### **5. VENUES**

Even a short visit by a single dignitary is apt to produce many secondary meetings and rallies as part of the overall visit – all of which need to be taken into account when planning EMS coverage. Of course, there might be many such gatherings if several dignitaries are present for a single day or over the course of several days.

All of the venues need EMS coverage as well as coverage for all the other people in attendance such as the media.

This section should list all places (buildings, auditoriums, stadiums, etc.) where activities will take place and should give the following information:

- (a) Location
- (b) Time of event
- (c) Dignitary(s) present
- (d) EMS unit(s) and personnel present
- (e) Cell phone number and radio frequency

they will be using

- (f) Other units/services on site:

- o Fixed aid stations
- o Fire/police units
- o Haz Mat/Heavy Rescue

A staging area needs to be determined for every site in case a terrorist event occurs that requires the presence of a large number of EMS units. The selected area should be chosen in coordination with security to ensure quick access.

### **6. COMMUNICATIONS**

Although each section should have all the communication information relevant to that section, a separate listing will ensure that all information is easily available as well as correct.

This section lists every person (fire, police, EMS) at any location and their cell phone numbers, site telephone

numbers (some may be installed just for the event), and radio frequencies.

Activities held at fixed facilities such as stadiums, gymnasiums or college buildings will have telephones which are not listed in telephone directories and may not be known to EMS dispatch. All these numbers need to be listed in this section.

### **7. MUTUAL AID**

Part of the EMS planning should include mutual aid agreements with other EMS services. The list should include private organizations or nearby city/county services available (BLS, ALS, heavy rescue, etc.) and how to contact them in case of emergency.

It should be determined beforehand what radio frequency EMS Services will use on-site and to what location they should respond (usually a predetermined staging area). The route to the staging area should also be written in the plans in case some secondary and local roads may be closed off.

Although not likely, it is possible that a mass casualty incident which would take days to mitigate, might occur. In this case, the services of organizations such as the Red Cross or Salvation Army may be needed. This section should list what these organizations are able to supply, how to contact them, and where they would be located if needed (usually at a site on the periphery).

### **8. STAGING AREAS**

It will be necessary to have fire, rescue, and EMS units on-site during the event. Exactly what units and how many, will depend on the specific mass gathering and the needs of the planners in conjunction with security.

These units will need to be at a staging area (or several depending upon the geography). The planning book should have the staging areas listed, the units available, personnel present, and available forms of communications (radio frequencies, cell phones, or land lines).

### **9. MEDICAL**

The event will need to have on-site medical care to cover all people present. A medical unit is typically dedicated to cover the dignitary, while others are on-site to provide services to the media and other participants. These units are in addition to units available for the people attending the event.

ALS transport units must be on-site if it is necessary to take a patient to the hospital and may be based at fixed medical

aid stations. It may be deemed necessary to have mobile teams with ALS or BLS equipment, either on foot or on a golf cart, to patrol the area in order to provide rapid response.

All of the on-site medical care teams and medical aid stations should be listed in the medical section of the planning book along with their communication equipment (radio frequencies, cell phones, or land lines.)

### **10. MEDIA SITES**

Many media personnel will be present, both national and international, and they will need to have rooms (or buildings) for their personnel. The news media will have an impressive array of trucks with satellite uplink equipment and they will require a large outdoor area.

All of this information will need to be listed in the planning book along with the medical units that will provide care for them.

### **11. PROTESTORS**

A typical security requirement for mass gatherings of the type being discussed here is to limit protestors to a certain area or areas. These locations need to be listed in the planning book.

The protestors' areas will need medical coverage, both by a fixed aid station and ALS or BLS transport unit.

Any protestor that needs to be transported to a hospital should be taken to a hospital other than the one the dignitary would be taken, in order to prevent any verbal or physical fracas between the protestors and dignitary.

It should be noted that EMS personnel at the protestor site should have access to and know how to use SCBA or gas masks in case tear gas is used by the police for out-of-control behavior by protestors.

### **MAPS/BUILDING PLANS**

This is a very important part of the planning book because of the many people from outside the local jurisdiction who will be part of the event. Emergency personnel will be expected to respond rapidly to locations with which they may not be familiar and will need detailed information provided to them.

### **MAPS**

The map section will need detailed maps of routes that the dignitaries will take to and from the event(s) as well as maps

of routes between venues. Any roads or intersections that are closed off, especially by fences or barricades, will need to be clearly marked.

Similar maps will need to be provided for any locations involved in the event such as stadium complexes, universities, fairgrounds, or parks. These maps should have all streets and buildings identified by name.

Sites that have gates or fences should have this information clearly noted. Some gates may be opened by security if needed for emergencies, in which case the appropriate security service needs to make sure the security personnel are in place and have appropriate keys.

Some venues such as parks, fairgrounds, or universities should have main thoroughfares marked (and kept clear by security) to allow rapid travel of emergency vehicles from one end of the venue to the other.

### **BUILDINGS**

Structures such as auditoriums or sports complexes will be generally unfamiliar to fire and police personnel, and the floor plans of any such building need to be in the planning book. Buildings need to be identified by whatever designation they have, such as “Beaumont Auditorium”, “Building 25”, or “City Auditorium Complex.”

A person from the various venues who is intimately familiar with the buildings (e.g. sports complex or University) could be useful at the JOC, in case special situations arise that need detailed information.

If planning time allows, photos of the buildings (both close-ups and far shots) should be included so that people outside local jurisdiction have a mental image of the layout and buildings.

Many of these buildings will have some of the doors locked to prevent entry from the outside. Such doors need to be marked and information about what security officer may open them needs to be listed in order to allow entry for emergency personnel.

### **OTHER CONSIDERATIONS**

#### **ON-SITE TRANSPORT**

Venues that include large areas like a fairground, university, or parks will have many emergency personnel at locations throughout the site. Depending upon the length of the event, these personnel will need to be relieved at times, or be brought food, water, and supplies. This will require on-site

transport with dedicated personnel to perform this task. Vehicles ranging from golf carts to vans can be used for this function. They will need appropriate communication gear and ID badges.

### **FOOD AND WATER**

All emergency personnel (fire, police, and EMS) will need appropriate food and water, the latter being of great importance in hot weather and particularly if they are stationed outside.

How food is supplied depends upon the specifics of the event and how many personnel are available. It may be possible to have a central food location where personnel can be relieved and brought by on-site transport for food breaks. If it is not possible to do so, then food will need to be transported to the personnel. If this is the case, the food items selected must not become spoiled and hence unsafe to eat between the time it is prepared and delivered.

It might be prudent to advise personnel to obtain such things as pre-packaged food bars and bottled water in case food and water cannot be supplied to them in a timely manner.

### **ON-SITE WRECKERS**

Many vehicles, from private cars to emergency units, will be on-site. If a vehicle becomes disabled, it could cause a major problem by blocking access routes. A wrecker or tow truck should be on-site and manned at all times for such an event. Again, this information, along with the communication channel used by the tow truck operator, needs to be in the planning book.

### **SITE PERSONNEL SICK CALL**

An event of the magnitude discussed here will have many emergency and non-emergency personnel on-site. Many of them will be from outside the area, will not have a local doctor, or will be unable to access their doctor because they can't leave the site.

Provisions should be made to attend to their injuries or health needs as they arise. Many mechanisms are possible, but the main medical aid station may have a physician in attendance who could provide needed care. These services need to be provided for the duration of the event.

### **DISPATCH AND COMMUNICATION**

The dispatch centers for fire, police, and EMS should have an extra dispatcher whose only task is to communicate with their units at the event. Separate dedicated channels need to

be used so that there is no interference with non-event operations. These dispatchers will need a planning book with them.

An alternative to this would be to have fire, police, and EMS dispatchers, with appropriate equipment, at the JOC. If this is the case, then emergency power generators should be available.

### **HELICOPTER LANDING SITE**

A helicopter landing site may be needed if the location requires some patients to be airlifted to a medical center. Also, some dignitaries may arrive by helicopter instead of a motorcade.

If a helicopter landing site is needed, then it will need to be kept secure by police, whether being used or not, and have appropriate fire and rescue equipment assigned to it.

### **VICTIM ASSISTANCE CENTER**

If a mass casualty incident occurs, there will be many people requiring psychological as well as physical or spiritual support, and other needs that require attention.

A predetermined site should be selected for these services, as well as the provision of required staff and supplies such as food and refreshments. The Red Cross or Salvation Army may be able to assist.

People needing the services of the Victim Assistance Center could be transported by bus, either city or private, if prior arrangements are made. The Center will need adequate communication equipment including commercial phone lines.

### **SIGNAGE**

These events will have many people from outside the area who will be unfamiliar with roads, streets, and buildings. The flow of people, both by foot and car, could be facilitated by signs that indicated routes to the places or buildings where activities will be held. The reduction of traffic jams will make life much easier for security services.

### **MINI-ICU**

These events will have a very large number of people in attendance, along with a large number of vehicles. It is entirely possible that a critically ill or injured person could not physically be transported to a hospital. For this reason, pre-planning should consider the formation of a “mini-ICU” at some appropriate location on site staffed by a physician

and nurse.

Equipment and supplies which would be at this site should be:

1. Ventilators
2. Chest-tube set ups
3. IVACs
4. Respiratory therapy equipment
5. Thrombolytics
6. Vasopressors
7. Baby delivery supplies

### **DEAD BODIES**

Before the event begins it should be agreed upon how to dispose of deceased people, either by natural or unnatural causes, particularly if the person is one of the dignitaries. History has shown that this topic can be very contentious.

Local, state, and federal laws should be examined by event planners in conjunction with the local and state medical examiners. The agreed upon disposition of dead bodies should be part of the written plan and be in the planning book.

### **PRESS RELATIONS**

Events such as these will have a large corps of local, state, national, and international press personnel. An experienced person should be designated as the spokesperson who will meet their needs. This person should be identified in the plans and the location of press conferences should be well known to the press (preferably at the Joint Information Center). The spokesperson should have easy communication channels to the JOC so that individual can get rapid and accurate information. The personnel at the JOC should be aware of the needs of the press and not delay in supplying their official press spokesperson with needed information.

### **WALK-THROUGH**

After all the plans are formulated, the senior members of fire, police, EMS, and event planners should schedule a walk-through with plans-in-hand to make sure that what they think is in place, actually is in place.

Many of the final “walk-through” tasks could be delegated to appropriate members of the respective services as long as



a final meeting is held where their findings are discussed. Once the event begins it will be too late to obtain equipment, supplies, or personnel.

### INFORMATION FROM THE LITERATURE

The first article listed below discusses the many details involved in planning care for mass gatherings. The events discussed are those for which intense security preparations are not needed.

The second article reviews the literature for the past twenty-five years and gives much information which is useful for the planning process.

The only events which have had a dignitary in attendance and has been written up in the literature are those of the visit of the Pope. The next four articles discuss events which had very high security requirements.

The last article listed concerns the 1996 Olympics in Atlanta for which elaborate plans were formulated for possible terrorist acts, particularly chemical or biological agents. The only terrorist act was the single explosive device for which no person or group has claimed responsibility

### ACKNOWLEDGEMENT

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### References

1. "Medical Support for Mass Gatherings"  
Ralph B. Leonard, Ph.D., M.D.  
Emergency Clinics of North America  
Vol. 14, No. 2, May 1996, pp. 383-397  
This is an in-depth discussion of how to plan medical care for large crowds. It contains many details not included in this article as well as many references.
2. "EMS for the Masses: Preplanning Your EMS Response to a Major Event"  
Ralph B. Leonard, Ph.D., M.D. and  
Kimberly M. Moreland, M.D.

Emergency medical Services  
Vol. 30, No. 1, January 2001, pp. 53-60

An in-depth discussion of making plans for large-scale events. Similar to Reference 1, except aimed at EMS organizations.

3. "Mass Gathering Medical Care: A Twenty-Five Year Review"

John A. Michael, M.D., Joseph A. Barbera, M.D.  
Pre-Hospital and Disaster Medicine

Vol. 12, No. 4, October-December 1997, pp. 305-312

This article gathered and analyzed data from all published reports of medical care in the last twenty-five years. It gives valuable information about the number of patients requiring medical care.

4. "How to Cope with a Visit from the Pope"

Jane H. Federman, M.D., Lorraine H. Giordano, M.D.  
Pre-Hospital and Disaster Medicine

Vol. 12, No. 2, April-June 1997, pp. 86-91

This article described the Pope's visit to New York City in 1995. It discusses pre-event planning, both security and EMS, as well as delivery of EMS care during the visit.

5. "Mass Casualty: Pope's Denver Visit Causes Mega MCI"

Howard M. Paul, EMT

Journal of EMS

Vol. 18, No. 11, November 1993, pp. 64-75

This article discusses EMS planning for the Pope's visit to Denver in 1995. The hot weather and lack of water produced an MCI.

6. "The Pope's Visit: Mass Gatherings and the EMS System"

Dan Gordon

EMS

Vol. 17, No. 1, January-February 1988, pp. 38-43

This article discusses the Pope's visit to Los Angeles in 1987. Both EMS planning and the tight security are discussed.

7. "Medical Planning of Mass Gatherings: A Retrospective Review of the San Antonio Papal Mass"

David A. Hnatow, M.D., Donald J. Gordon, Ph.D., M.D.  
Pre-Hospital and Disaster Medicine

Vol. 6, No. 4, October-December 1991, pp. 443-450

This article discusses EMS planning for this event and analyzes the EMS care provided.

8. "Medical Preparedness for a Terrorist Incident Involving Chemical or Biological Agents During the 1996 Atlanta Olympic Games"

Trueman W. Sharp, M.D., M.P.H., et al.

Annals of Emergency Medicine

Vol. 32, No. 2, August 1998, pp. 214-223

The Olympic games are the ultimate gathering of international stars and celebrities making it a high risk event for terrorist actions. The extensive plans made for chemical and biological terrorist acts are discussed in detail.

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