

Chester County EMS Mass Casualty Response Plan

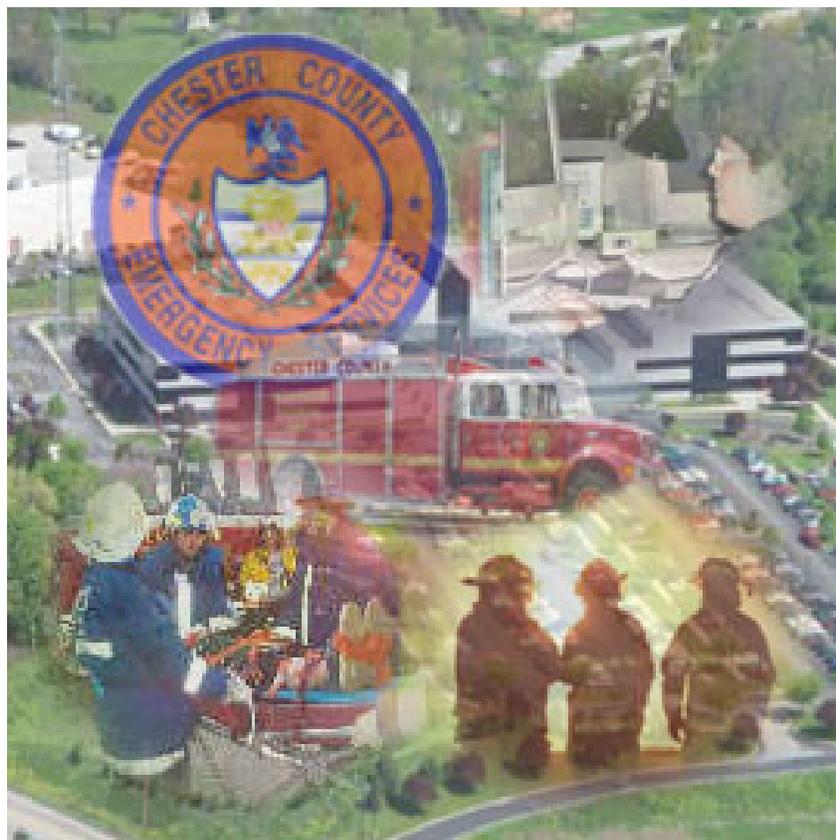


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STATEMENT OF PURPOSE

This Mass Casualty Response Plan is designed to assist Chester County Emergency Medical Service providers in properly organizing and controlling resources at the scene of a disaster. These guidelines are intended to serve as the central core for emergency medical services operations at a disaster. **This Plan is not a substitute for education and training in mass casualty incidents, or the National Incident Management System and the Incident Command System.**

These disaster-operating guidelines are also intended to identify the basic working relationships, which should exist between EMS, EMA, fire, rescue, law enforcement and other agencies at a large-scale incident. As such, these disaster-operating guidelines fully support and utilize the concept of the National Incident Management System (NIMS). It is strongly recommended that all Chester County EMS providers meet with their local emergency/public service agencies, municipal officials and county/local emergency management officials who might be involved in a large scale incident to develop or review a specific emergency response plan for the community(s) they serve.

OVERVIEW

A loss of property, a loss of human life, a large number of injuries ranging from minor to life threatening, separation of family members and an overall disturbance of routine operating procedures characterize disasters.

The treatment and/or stabilization, extrication, transportation of the injured to appropriate medical facilities, rehabilitation of responding personnel, recognition and/or institution of critical incident stress management team, restoring and maintaining order and identifying the dead are common among the varied responsibilities which may be unexpectedly thrust upon emergency response organizations.

Disasters can occur in varying degrees, at any time, and in practically any conceivable situation. The potential categories for disasters in the Chester County EMS Region may include, but are not limited to:

- a. Major vehicular accidents with multiple victims
- b. Fires
- c. Environmental Disasters
- d. Public Transportation Accidents (Aircraft, Train, Bus)
- e. Mining or Construction Accidents
- f. Industrial Accidents
- g. Building Collapses
- h. Terrorism incidents
- i. Chemical
- j. Biological
- k. Radiological
- l. Nuclear
- m. Explosives
- n. Incendiary Devices

All disasters present several diverse and unique problems requiring prompt and efficient management. In order to identify the roles and responsibilities for emergency response personnel expected to handle initial triage and patient care at a disaster scene, a preconceived plan of action must exist. The plan requires the participation and cooperation of local agencies, such as, but not limited to:

- a. Law Enforcement Agencies
- b. Fire Departments
- c. EMS Providers
- d. Rescue Services
- e. Hospitals
- f. Haz Mat Teams
- g. Regional Counter Terrorism Task Force
- h. Public Health
- i. Educational Institutions
- j. County Coroners
- k. Emergency Management Agencies
- l. Governmental Agencies
- m. Critical Incident Stress Management Teams
- n. Pennsylvania Emergency Management Agency
- o. Federal Emergency Management Agency
- p. Ancillary Volunteer Agencies (i.e. American Red Cross)
- q. Pennsylvania Department Of Health
- r. Mental Health

Specific responsibilities must be assigned to each participating agency. Job assignments should include written descriptions with duties and responsibilities clearly defined. The usual everyday responsibilities of the individuals and agencies involved will, by necessity, change to be able to handle the new priorities created by the disaster.

SEQUENCE OF DESIRED EVENTS AT A MASS CASUALTY INCIDENT

THE PRIMARY CONCERN OF ALL EMERGENCY RESPONSE OPERATIONS MUST BE TO SAVE AS MANY LIVES AS POSSIBLE WITH THE RESOURCES WHICH ARE AVAILABLE. In certain cases such as floods, hurricanes and tornadoes that have been forecast by the weather bureau, rescue and evacuation operations may begin before the natural disaster actually strikes. This will occur by agencies being alerted to bring their immediate manpower needs up to operational levels. **The success of any operation will be enhanced by effective education and training on The National Incident Management System which has been planned in advance.**

- Readiness and education
- Preparedness and mitigation
- Activation of the emergency plan, to include early warning, notification and preparation for potential disasters, which may involve multiple patients.
- Concise response system implemented. First arriving police, fire and EMS units implement a unified command system. This includes the following:
 - a. An Incident Command Post should be established and its location transmitted to responding emergency service units by their communications center before their arrival at the scene. This notification may be made through the use of a special radio alert tone and announcement as to the initiation and location of the Incident Command Post.
 - b. The Incident Command Post is a joint effort between the principal command personnel of all emergency service agencies represented at the scene and is to serve as the central base of operations at the disaster scene. Therefore, key officials, (i.e., Fire, Police, EMS, Governmental Officials, EMA Officials, Federal Officials, Building Owners, etc.), should be directed to the Incident Command Post upon their arrival at the scene.
 - c. The Incident Command Post should be identified by the display of a GREEN means of identification. The means of identification should be visible from all sides of the stationary Incident Command Post so that it is easily identified at the scene. For example, a GREEN Incident Command Post sign, flag or light might be used to make this designation.
- First EMS personnel at the scene perform a primary survival scan, size-up of the incident scene and identify the EMS Group Supervisor.
 - a. Initial Triage consists of an initial “walk through” by the Triage Unit Leader and first arriving emergency care personnel so that an approximate patient count can

be determined and patients tagged according to the apparent severity of their injuries. The Triage Unit Leader must quickly present a report on the patient count and approximate number of patients in each category to the EMS Group Supervisor.

- Initiation of critical life-saving treatment techniques during the rapid initial survey performed by the first arriving EMS personnel. For example, opening an airway or control of severe bleeding.
- Notification of **EXTENT** and **NUMBER OF CASUALTIES** to the communications center by the EMS Supervisor. The Communications center then notifies all agencies involved.
- Activation of area hospital disaster plans for external disasters according to the level of disaster that has been reported and the number of patients each facility may receive.

DISASTER LEVEL

Level 1	Mass casualty incident resulting in less than 10 surviving victims.
Level 2	Mass casualty incident resulting in 10 to 25 surviving victims.
Level 3	Mass casualty incident resulting in more than 25 surviving victims.
Level 4	Mass casualty incident resulting in a number of surviving victims that could necessitate an inter-region response and/or activation of an additional disaster plan or additional resources. Such a plan needs to be developed in cooperation with your local or County Emergency Management Agency. This can include plans or resources from the PA Dept. of Health such as a smallpox plan or plans from one or more of the Regional Counter Terrorism Task Forces, Emergency Management Officials as well as number of other agencies.

- **Always consider the need for patients to be decontaminated if they have been exposed to ANY hazardous material.**
- Patients tagged according to appropriate priorities by assigned Triage Team.
 - a. All patients found to be “Dead-On-Arrival” should be left where they were found, if possible, until the Coroner and law enforcement officials confirm their disposition and complete their initial investigation of the incident. The deceased patients can be covered as long as the scene integrity will not be destroyed. If it becomes necessary to move a deceased victim in order to access or treat remaining victims, then the location and position that the deceased was found in must be noted in order to assist in identification and further investigation. A temporary morgue can be established in an area isolated from the patient care areas, if necessary.
- Patients immobilized rapidly on portable transportation devices.
- Patient Collection Stations established in well-marked areas by the Treatment Leader.
 - a. The Patient Collection Stations should be divided into three separate sections, color coded by some means to match the regional triage tags:

▪ Red	1st Priority
▪ Yellow	2nd Priority
▪ Green	3rd Priority
 - b. Each section should allow sufficient space to enable emergency personnel to move around freely and treat multiple patients simultaneously without causing

interference to one another. This will also allow for the easy removal of selected patients by transport personnel once at-scene patient care is completed and the patients are ready to be moved to an EMS transport vehicle.

- c. An area adjacent to the patient collection stations should be established for those “patients” that have been involved in a disaster but have sustained no injuries. Non-injured individuals that subsequently complain of injuries or illness may be re-triaged and moved to the appropriate patient collection station.

- Patients arranged by priority at Patient Collection Stations.
- Incoming emergency units report to Vehicle Staging Area designated by the EMS Group Supervisor/Operations Section Chief and drop off personnel and requested supplies / equipment. The driver must remain with the vehicle /litter and await further assignment.
- Patient treatment implemented at Patient Collection Stations.
- Advanced life support personnel and/or designated physician disaster response teams treat patients most in need of advanced care at Patient Collection Stations.
- Patients transported in priority sequence, if possible, to designated hospitals as assigned by Transportation Group Supervisor. **In a Mass Casualty Incident, several patients SHOULD be transported in each vehicle in order to maximize the transportation resources that are available. EMS units should not be allowed to leave the incident scene with only 1 patient on-board.**
 - a. The Transport Group Supervisor, in conjunction with the Treatment Group Supervisor, will oversee the selection of patients to be transported from the designated Patient Collection Stations to EMS transport vehicles from an established Vehicle Staging Area. The Transport Group Supervisor will also decide the hospital to which each patient is to be transported and will maintain a log of patient flow. It is therefore extremely important that the three separate patient collection areas be maintained to ensure that the Transport Group Supervisor will have the means to make logical and concise decisions for transportation patterns. This saves time and lives.
- Establish post incident equipment collection site.
- Equipment and supplies returned to agencies involved.
- CISM services made available.
- Demobilization of personnel and units.

- Preparation and pre-planning for long-term operations.
- Plan deactivated.
- Reports and records assembled by Incident Commander.
- Post incident review of disaster scene operations conducted by all agencies involved, shortly after the incident.
- Review and update of plan.
- Return to readiness and conduct training.

NIMS Structure at Multiple / Mass Casualty Incidents

It is the recommendation of Chester County DES that providers within Chester County utilize National Incident Command System (NIMS) when mitigating a multiple/ mass casualty incident. The use of the NIMS system is beneficial for the following reasons:

- It is more common, used by most responder agencies nationally.
- It is flexible and can expand or contract with the escalation and de-escalation of the incident.
- It is ideal for large scale or potentially large-scale incidents in the same jurisdiction, as well as in situations where there are multiple agencies from different jurisdictions involved in the incident management.
- It works well if the incident is large enough or located such that it covers multiple jurisdictions.
- Homeland Security Presidential Directive 5
“To prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies, the United States Government shall establish a single, comprehensive approach to domestic incident management. The objective of the United States Government is to ensure that all levels of government across the Nation have the capability to work efficiently and effectively together, using a national approach to domestic incident management.”

On scene operations are usually orchestrated by the agency having the most involvement **IF** that agency has the resources for the type of incident that is encountered. The NIMS structure more easily supports the integration of non-public safety agencies into the incident management scheme than does the single command structure. It allows all agencies to participate in the development of the overall incident management objectives and selection of strategies to be employed in the mitigation of the incident. It also ensures integration and consolidation of action plans and maximizes the use of resources.

The NIMS structure also plays an important role in managing the “span of control” for personnel that are operating on an incident. It assists those that have experience in managing large-scale incidents as well as those who do not commonly manage large-scale incidents. This “span of control” is vital to the success of a large-scale incident.

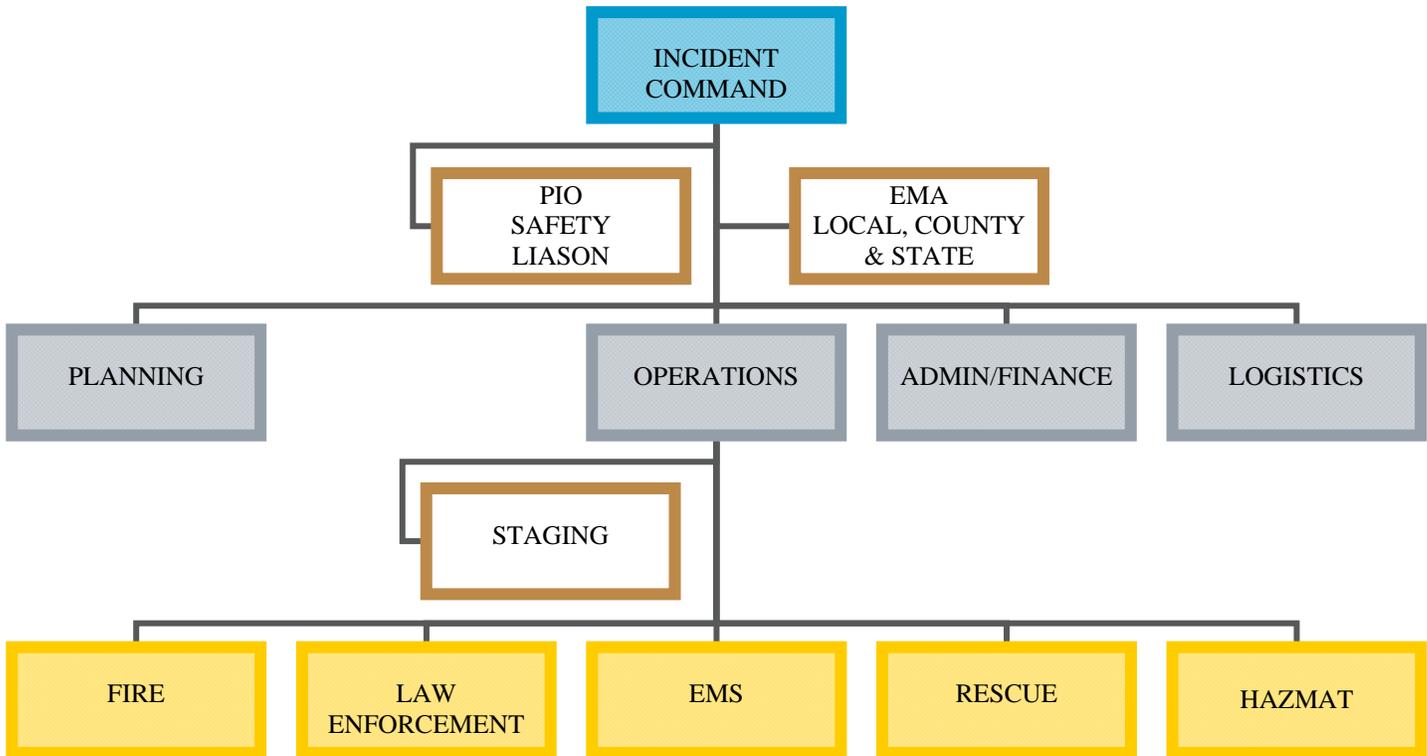
- A manageable span of control should be kept at between 3 to 7 people, with an optimum number of 5 people.
- As a general rule, each person in the structure should have between 3 to 7 people, with an optimum number of 5 people, reporting to him/her.

As the incident escalates, the lines of responsibility can be expanded and enlarged. Conversely, as the incident de-escalates and there is a demobilization of resources, the system can be downsized to meet the needs of the incident size at that time, right down to termination of the entire incident.

The incident command structure affords the ability for relief or change in command during large scale or extended incidents that go beyond regular or customary shift or work patterns. Finally, the incident command structure easily adapts to written forms of communications and planning where mitigation plans may need to be approved in writing.

The organizational charts that follow are a typical representation of the command structure that would be employed under the unified command system. EMS agencies within Chester County are strongly encouraged to utilize the incident command structure in their planning and response to multiple/mass casualty incidents.

The Incident Command System



INCIDENT COMMANDER: The individual in overall command of an emergency incident.

PIO (Public Information Officer): The individual that is responsible for the release of information about the incident to the news media and other appropriate agencies and organizations.

SAFETY: The individual that is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety.

LIAISON: The individual that is responsible for interacting, (by providing a point of contact), with the other agencies and organizations involved in a disaster.

EMERGENCY MGMT. / LOCAL COUNTY GOVERNMENT: Individuals from these agencies that might have a role in the mitigation of a mass/multiple casualty incident. May serve as overall incident commander.

PLANNING: Responsible for the collection, evaluation, dissemination and use of information regarding the development of the incident and status of resources.

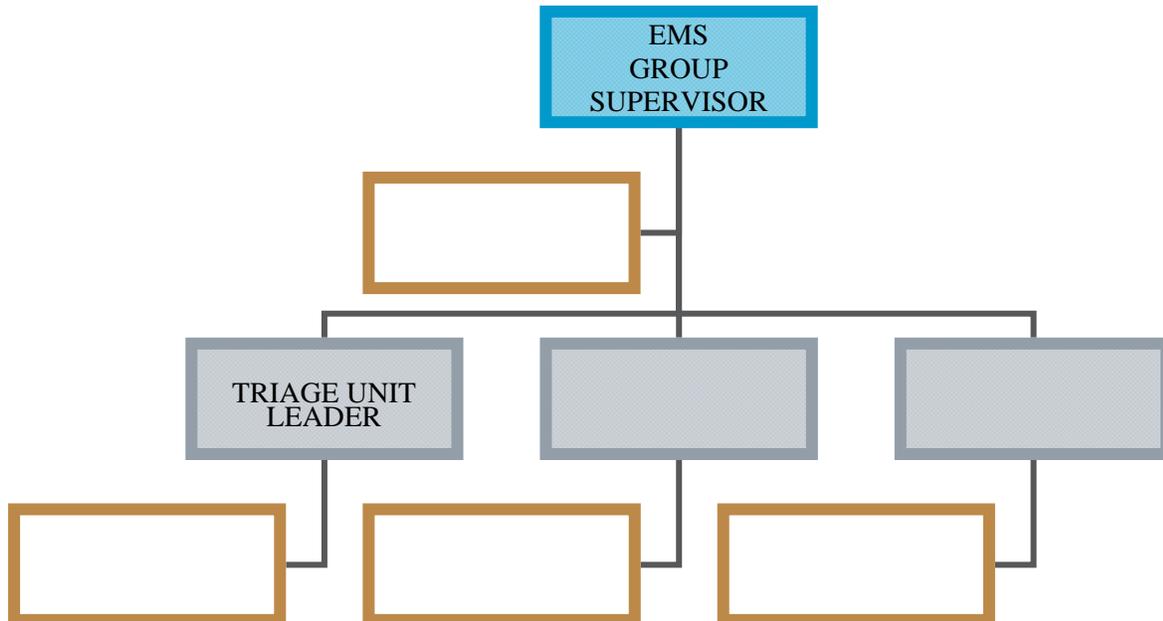
OPERATIONAL: Responsible for the management of all operations directly applicable to the primary mission.

LOGISTICS: Responsible for providing facilities, services and materials in support of the incident.

ADMIN. / FINANCE: Responsible for organizing and operating the finance section within the guidelines, policy and constraints established by the incident commander and the responsible agency.

Primary EMS Operations Structure within the Incident Command System

LEVEL 1 RESPONSE, 10 VICTIMS OR LESS



EMS GROUP SUPERVISOR- The individual that is responsible for the overall coordination of all EMS activities at a disaster scene. This individual should be located at the unified command post and coordinates EMS activities with the overall Incident Commander.

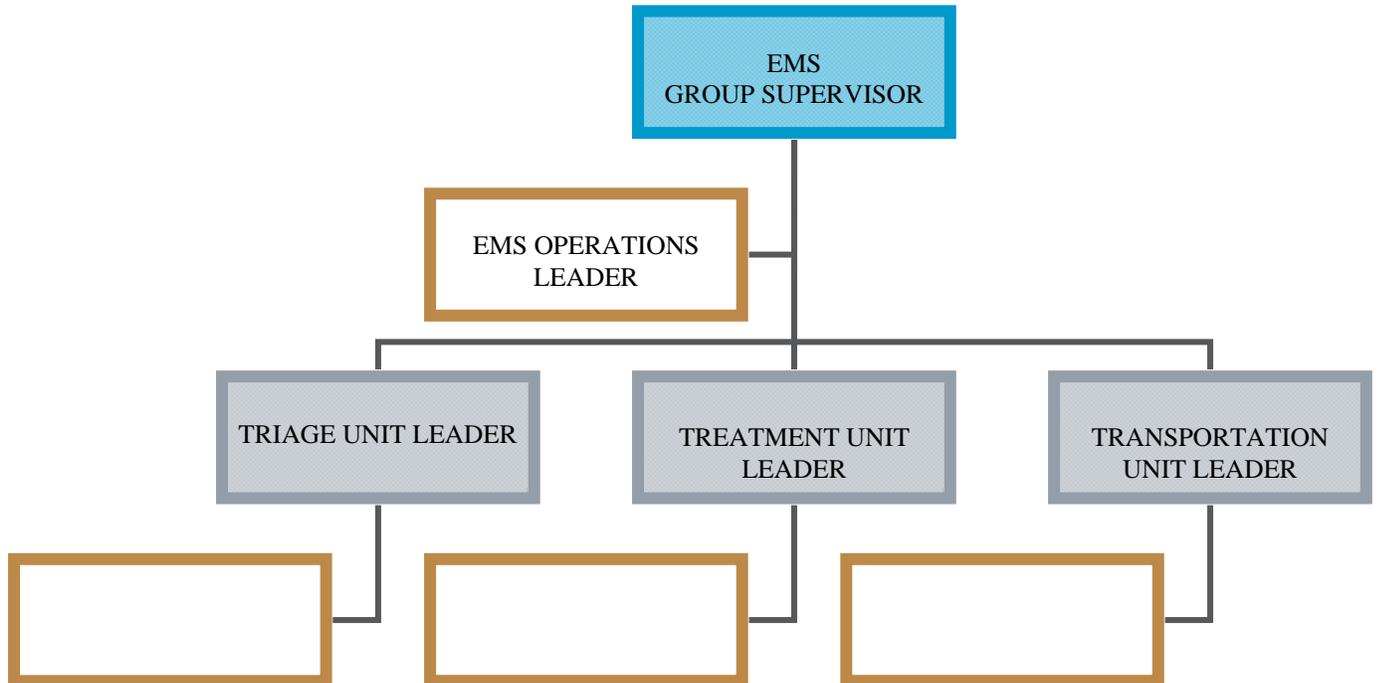
- In a Level 1 Response, the EMS Supervisor should also be able to perform the duties normally assigned to the EMS Operations Leader and the Transportation Leader.

TRIAGE UNIT LEADER- The individual that is responsible for the overall coordination of triage activities at a disaster scene. Answers to the EMS Group Supervisor.

- In a Level 1 Response, the Triage Unit Leader should also be able to perform the duties normally assigned to the Treatment Leader.

EMS Operations Structure Within the Incident Command System

LEVEL 2 RESPONSE, 10 to 25 VICTIMS



EMS GROUP SUPERVISOR- The individual that is responsible for the overall coordination of all EMS activities at a disaster scene. This individual should be located at the unified command post and coordinates EMS activities with the overall Incident Commander.

EMS OPERATIONS LEADER- The individual that is responsible for the coordination and management of EMS related resources at the incident site and acts as a liaison between the EMS Group Supervisor and EMS practitioners. Answers to the EMS Group Supervisor.

TRIAGE UNIT LEADER- The individual that is responsible for the overall coordination of triage activities at a disaster scene. Answers to the EMS Group Supervisor.

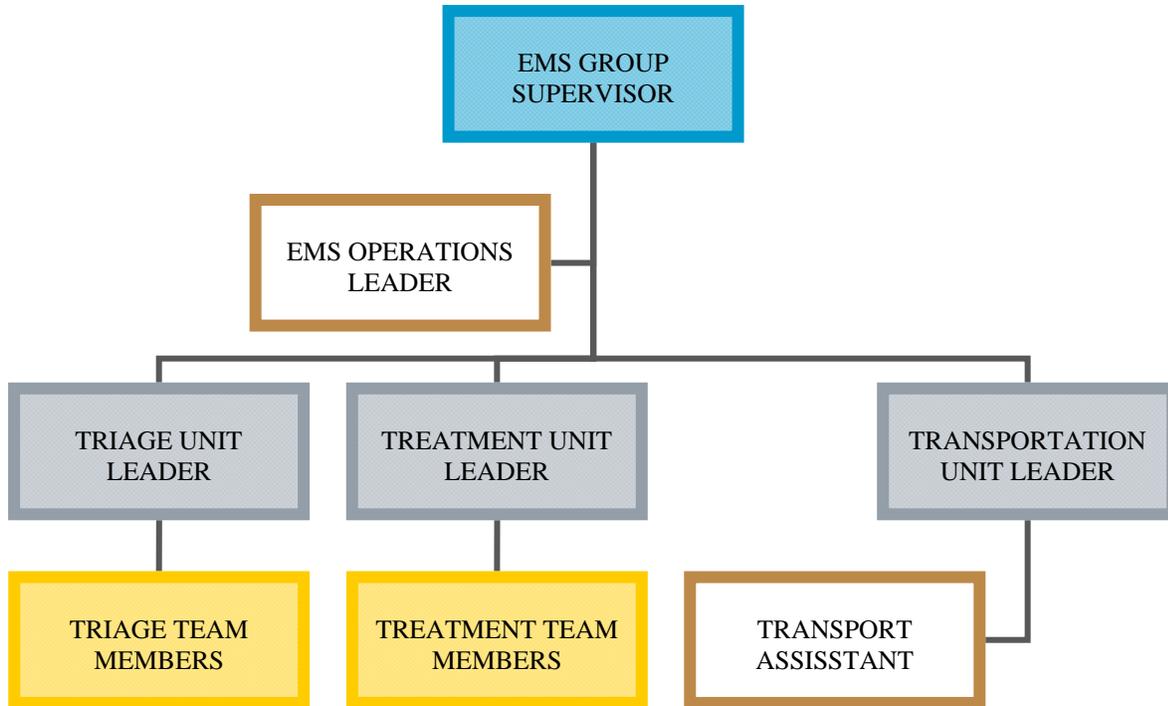
- 3 Areas of triage
 - Immediate (First Priority **RED**)
Life Threatening Injuries/Illness
 - Secondary (Second Priority **YELLOW**)
Moderate Injuries/Illness
 - Delayed (Third Priority **GREEN**)
Minor Injuries/Illness

TREATMENT UNIT LEADER- The individual that is responsible for the coordination of the treatment of patients at the patient collection stations. Answers to the EMS Group Supervisor.

TRANSPORTATION UNIT LEADER- The individual that is responsible for communicating with sector officers and hospitals to manage the transport of patients to hospitals from the scene of the disaster. Answers to the EMS Group Supervisor.

EMS Operations Structure Within the Incident Command System

LEVEL 3 RESPONSE, 25 VICTIMS OR GREATER



EMS GROUP SUPERVISOR- The individual that is responsible for the overall coordination of all EMS activities at a disaster scene. This individual should be located at the incident command post and coordinates EMS activities with the overall Incident Commander.

EMS OPERATIONS LEADER- The individual that is responsible for the coordination and management of EMS related resources at the incident site and acts as a liaison between the EMS Group Supervisor and EMS practitioners. Answers to the EMS Group Supervisor.

TRIAGE UNIT LEADER- The individual that is responsible for the overall coordination of triage activities at a disaster scene. Answers to the EMS Supervisor.

- **Triage Team Members:** Groups of medically trained personnel that assist the Triage Leader in the triaging of victims.

TREATMENT UNIT LEADER- The individual that is responsible for the coordination of the treatment of patients at the patient collection stations. Answers to the EMS Group Supervisor.

- 3 Areas of triage
 - Immediate (First Priority **RED**)
Life Threatening Injuries/Illness
 - Secondary (Second Priority **YELLOW**)
Moderate Injuries/Illness
 - Delayed (Third Priority **GREEN**)
Minor Injuries/Illness

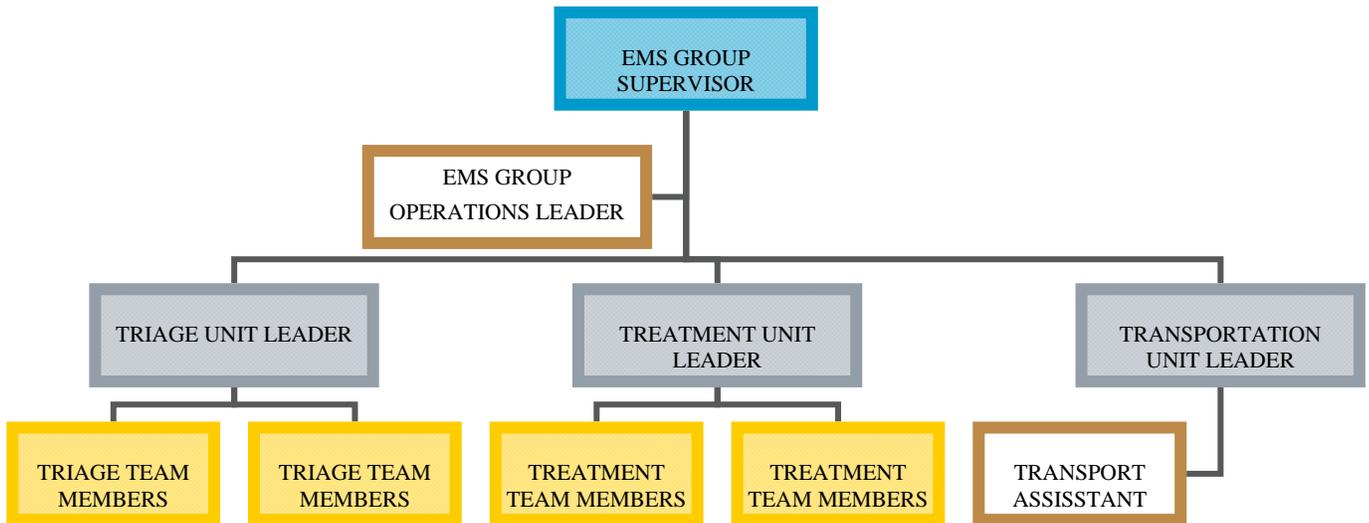
- **Treatment Team Members:** Groups of medically trained personnel, including physicians and nurses that assist the Treatment Leader with the treatment of victims brought to the Patient Collection Stations.

TRANSPORTATION UNIT LEADER- The individual that is responsible for communicating with the Triage and Treatment Leaders and hospitals to manage the transport of patients to hospitals from the scene of the disaster. Answers to the EMS Group Supervisor.

- **Transport Assistant:** An individual that assists the Transportation Unit Leader in the performance of his/her duties.

EMS Operations Structure Within the Unified Command System

***LEVEL 4 RESPONSE, NUMBER OF VICTIMS THAT COULD NECESSITATE A REGION WIDE RESPONSE OR OTHER RESOURCES**



EMS GROUP SUPERVISOR- The individual that is responsible for the overall coordination of all EMS activities at a disaster scene. This individual should be located at the incident command post and coordinates EMS activities with the Incident Commander.

EMS GROUP OPERATIONS LEADER- The individual that is responsible for the coordination and management of EMS related resources at the incident site and acts as a liaison between the EMS Group Supervisor and EMS practitioners. Answers to the EMS Group Supervisor.

TRIAGE UNIT LEADER- The individual that is responsible for the overall coordination of triage activities at a disaster scene. Answers to the EMS Group Supervisor.

- **Triage Team Members:** Groups of medically trained personnel that assist the Triage Sector Officer in the triaging of victims. As the Level of the incident escalates, more teams may be needed

TREATMENT UNIT LEADER- The individual that is responsible for the coordination of the treatment of patients at the patient collection stations. Answers to the EMS Group Supervisor.

- 3 Areas of triage
 - Immediate (First Priority **RED**)
Life Threatening Injuries/Illness
 - Secondary (Second Priority **YELLOW**)
Moderate Injuries/Illness
 - Delayed (Third Priority **GREEN**)
Minor Injuries/Illness

- **Treatment Team Members:** Groups of medically trained personnel, including physicians and nurses that assist the Treatment Leader with the treatment of victims brought to the Patient Collection Stations. As the Level of the incident escalates, more teams may be needed.

TRANSPORTATION UNIT OFFICER- The individual that is responsible for communicating the Triage and Transport Leaders and hospitals to manage the transport of patients to hospitals from the scene of the disaster. Answers to the EMS Group Supervisor.

- **Transport Assistant:** An individual that assists the Transportation Leader in the performance of his/her duties. As the Level of the incident escalates, more assistants may be needed.

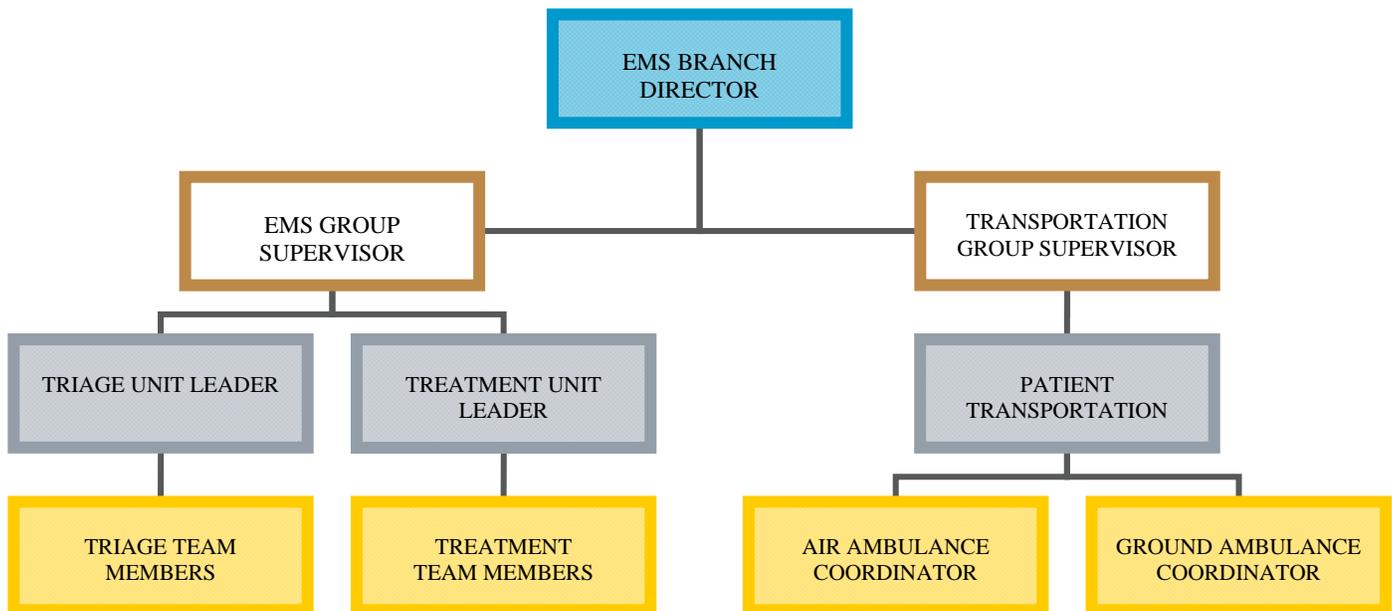
EMS BRANCH

The organizational level having functional or geographical responsibility for major aspects of incident operations. A branch is organizationally situated between the Operations Section Chief and the Group in the Operations Section, and between the section and units in the Logistics Section. Branches are identified by the use of Roman numerals or by functional area.

Branches may be established to serve different purposes for example:

1. The numbers of Groups exceed the recommended span of control for the Operations Section Chief officer.
 - The ratio for span of control for the EMS Group Supervisor is 1:5 when this is exceeded the EMS Group Supervisor should set up a Branch.
2. The nature of the Incident Calls for a Functional Branch System
 - In mass casualties, many different departments respond to the incident within the city. In doing so there will be different branches for each department.
Examples:
 1. Fire department (Branch I)
 2. Police department (Branch II)
 3. EMS department (Branch III)
3. The incident is multi-jurisdictional.
 - 2 different jurisdictions
 1. Geographical
 - a. City
 - b. County
 - c. State
 2. Functional
 - a. Law Enforcement
 - b. Public Health

EMS Operations Structure Within the Unified Command System Using the EMS Branch Concept



EMS BRANCH DIRECTOR- The individual that receives a delegated assignment for a specific span of control under the EMS Operation Chief.

EMS GROUP SUPERVISOR - The Individual that is responsible for the overall coordination of all EMS activities at a disaster scene. This individual should be located at the incident command post and coordinates EMS activities with the Incident Commander.

TRIAGE UNIT LEADER - The individual that is responsible for the overall coordination of triage activities at a disaster scene and reports to the EMS Group Supervisor.

- **Triage Team Members** - Groups of medically trained personnel that assist the Triage Sector Officer in the triaging of victims. As the level of the incident escalates, more teams may be needed.

TREATMENT UNIT LEADER - The individual that is responsible for the coordination of the treatment of patients at the patient collection stations. Answers to the EMS Group Supervisor.

- **Treatment Team Members** - Groups of medically trained personnel, including physicians and Nurses that assist the Treatment Leader with the treatment of victims brought to the Patient Collection Stations. As the level of the incident escalates, more teams may be needed.

TRANSPORTATION GROUP SUPERVISOR - The individual that is responsible for communicating with supervisors and hospitals to manage the transport of patients to hospitals for the scene of the disaster. Answers to the EMS Branch Director.

PATIENT TRANSPORTATION

Air Ambulance Coordinator
Ground Ambulance Coordinator

TRIAGE / TAGGING GUIDELINES

INITIAL TRIAGE AND DISASTER TAGGING GUIDELINES

The initial triage is based upon accepted triage procedures and in accordance with the county's standardized patient triage tags.

Prioritization of disaster victims differs somewhat from the routine classification of patients, e.g., a patient normally classed as a "Class 1" due to severe burns will be tagged as a 2nd priority patient, (yellow tag), at a disaster scene unless there is respiratory tract involvement.

Depending on the scope of the disaster, the total number of patients in need of care, and resources available to handle the victims, some patients with severe injuries which may not allow them to survive unless they are given immediate, intensified care, may have to be assigned lower priority "tags" for treatment/transport from the incident site. (Remember: your objective is to save as many patients as possible with the resources available).

UNINJURED / WHITE TAG

Individuals that have been involved in the disaster but are uninjured.

PRIORITY 1 / RED TAG

The patient's chance for survival depends on prompt care.

1. Witnessed Cardiac Arrest
2. Uncorrected Respiratory Problems (NOT mild respiratory distress).
3. Severe or Uncontrollable Bleeding (includes suspected internal bleeding).
4. Severe Shock
5. Open Chest or Abdominal Wounds.
6. Unconscious Patients.
7. Burns Involving the Respiratory Tract.
8. Severe Medical Problems.
 - a. Heart attack
 - b. Poisoning
 - c. Diabetes with complications
 - d. Abnormal childbirth situation (prolapsed cord, arm or leg presentation)
 - e. Loss of distal pulse in an extremity

9. Several Major Fractures, e.g. pelvis and femur).
10. Co-worker Injured.
11. Uncontrolled Emotional Disorders.

PRIORITY 2 / YELLOW TAG

Serious, but can be delayed while First Priority cases are handled.

1. Severe Burns (not affecting airway)
2. Spinal Injuries
3. Moderate Blood Loss
4. Conscious with Head Injuries

PRIORITY 3 / GREEN TAG

Can wait for treatment until higher priorities are cared for.

1. Minor Fractures
2. Minor Injuries That Are Controlled
3. Obviously mortal wounds where death appears reasonably certain. (These can be re-triaged later if personnel and/or resources become available).

DECEASED / BLACK TAG

Obviously dead (D.O.A.)

DECONTAMINATED PATIENTS

- 1. Patients who have been grossly decontaminated must be marked as “GROSSLY DECONTAMINATED” on the anatomy section of the triage tag and placed on the patient.**
- 2. Patients who have been completely decontaminated must be marked as “COMPLETELY DECONTAMINATED” on the anatomy section of the triage tag and placed on the patient.**

SMART Triage

THE TRIAGE PROCESS

Triage of patients at multiple casualty incidents and disasters may be the single most important medical activity at the incident site. It has been defined as the art of categorization of patients according to severity of illness or injury to allow the greatest benefit for as many as possible (Haywood 1984). An alternative definition is that triage is a temporary prioritization of critical care (Burkle, 1984).

TRIAGE DOCUMENTATION

Garner (1999) acknowledges that tags including a space for medical documentation (referred to hereafter as 'documentation tags', such as Smart Tag[®]) have more application than triage tags.

In fact, the medical literature documents many difficulties that have been experienced in the few incidents in which the use of triage tags have been attempted, leading Vayer et al. (1986) and Garner (1999) to suggest that the use of tags used only for the purposes of labeling priority categorization should be abandoned. Some of these problems, together with an indication of how the Smart Tag[®] design is seen to overcome the difficulties, are listed below.

- triage tag design only able to reflect deterioration in patient condition and not improvement (Vayer et al., 1986 and Barton et al., 1991);

The Smart Tag[®] tag allows upgradeable or downgradeable evacuation/treatment and/or transport color status as casualty's signs or surrounding circumstances change. It allows for dynamic evaluation and status can be rapidly altered up or down if and when necessary.

- insecure patient attachments with tags becoming dislodged (Coupland et al., 1992 and DeMars et al., 1980);

The Smart Tag[®] tag includes an integral elastic cord allowing for comfortable and flexible attachment to the casualty or clothing.

- tags may interfere with medical procedures (Coupland et al., 1992);

The Smart Tag is hand held and of an appropriate size that it will not interfere with any procedure.

- tags may become illegible as they are soaked in blood (Coupland et al., 1992)

The Smart Tag[®] tag is deemed to be extremely durable and weatherproof, made of rip and water proof material with an integral plastic sleeve. Tags made of paper or cardboard will fail if exposed to any liquid.

- tags not being available when required (Hodgetts, 1993, Orr et al., 1983, Nicholas et al., 1988);

The proposed Smart Incident Command System would distribute the Smart Tag[®] tags more widely throughout the available State front-line fleet, thereby helping to alleviate this problem.

- insufficient space to document patient information or treatment (Barton et al., 1991);

*The Smart Tag[®] tag includes a **Casualty Assessment Module**, allowing relatively objective assessment by first aid or fully trained personnel when time and/or staff resources allow. Coma scale scoring leads on to:*

***Trauma Scoring Module**, indicating the Glasgow Coma Scale and Triage Revised Trauma Score as utilized in the secondary survey.*

*The **Casualty Details Module** includes basic casualty and rescuer administrative information for record, continuity and subsequent analysis purposes.*

PEDIATRIC TRIAGE

Although major incidents are perceived to be rare, an analysis of the incidence of major incidents in Great Britain from 1968 to 1996 has shown that they occur three to four times per year (Carley, Mackway-Jones and Donnan, 1998). These incidents can be anticipated to involve a proportion of children, as indicated in Table 1 below.

Major incident	Year	Total no. of casualties	No. of pediatric casualties
Mass lightning strike (USA)	1977	47	47
Bologna bombing (Italy)	1980	291	27
M5 Coach Crash (UK)	1983	31	27
Chemical gas leak, Arizona (USA)	1987	>67	67
Zeebrugge ferry disaster (Belgium)	1987	536	N/A
Enniskillin bombing (UK)	1987	65	6
Hillsborough Stadium Crush (UK)	1989	260	N/A
Three Rivers regatta accident (USA)	1990	24	16
Avianca plane disaster (USA)	1990	92	22
Newton train crash (UK)	1991	26	7
Dimmocks Cote train crash (UK)	1992	45	12
York coach crash (UK)	1994	41	40
West Street bus crash, Glasgow (UK)	1994	33	33
Abbeyhill, Junction train crash, (UK)	1994	47	10
Tokyo sarin gas attack (Japan)	1995	640	N/A
Oklahoma bombing (USA)	1995	759	61
Warrington coach crash (UK)	1996	51	50
Manchester bombing (UK)	1996	217*	31
Dunblane mass shooting (UK)	1996	30	28
* Age recorded at hospital in only 181 cases.		N/A	Information not available.

The effective triage of children in a major incident has been criticized in the past, particularly in the aftermath of the Avianca plane crash in 1990 when van Amerongen et al concluded that children had not been adequately triaged at the site. It is clear that any newly introduced system of triage should preferably include an integral pediatric ‘module’ to ensure that:

- a) The needs of pediatric patients in major or mass casualty incidents are appropriately met.
- b) The natural subjective desire to treat all children as high priority is avoided. Appropriate prioritization must allow limited pediatric resources to be diverted to the genuinely needy children, whilst ensuring that adults requiring immediate intervention are not ignored at the expense of less severely injured children.

Garner (1999) notes that all previously published work on pediatric trauma suggests that the level of consciousness is the best physiological indicator of severe injury and that it would seem prudent to include this in any disaster triage algorithm for children.

The algorithms developed for the Smart Tape acknowledges that in infants, mobility cannot be used as a reliable initial assessment. Therefore, the system uses the ‘alert and moving all limbs’ to indicate an equivalent level of activity to walking, which also complies with Garner’s (1999) recommendation of including an indicator of the level of consciousness.

INTEGRATED ARRANGEMENTS FOR EMERGENCY MANAGEMENT

Vayer et al. indicate that primary problems with the use of both triage tags are that they are not used on a day-to-day basis with different, unfamiliar systems of work being introduced at the time of highest stress and confusion.

The Royal Victoria Hospital in Belfast dealt with 25 mass casualty situations from 1969 to 1976 secondary to terrorist incidents. In the process of using their disaster plan, learning from their mistakes and refining the plan, they learned many lessons. Of these, they believe that the most important one is to “keep as close to the daily routine as possible” (Byrnes, 1982). In their experience, if this principle is not followed, time will be lost in trying to implement a system that is relatively unfamiliar and, therefore, likely to break down.

Adhering to the ‘daily routine doctrine’ permits the expansion of services to accommodate additional patient load without the organization uncertainty that frequently accompanies the initiation of disaster procedures.

The recommended Smart Incident Command equipment includes the provision of initial major incident and triage pack on every front-line vehicle, thereby increasing the familiarity of operational crews with the equipment that will be used in the event of a major incident. Vayer et al. suggest that one approach to resolving the problem of infrequent use of documentation tags is to artificially inflate the frequency of their use, thereby fostering proficiency maintenance.

SMART TAG

Produced in water and rip proof material (Polyart Synthetic paper 200g) providing a completely water, body fluid proof triage card.

Durable enough to withstand decontamination shower.

Dynamic design for upgrading and downgrading of triage priorities

High visibility color panels for ease of recognition. (6 x 3.75 inches)

Only shows a single casualty priority.

Handheld

Allows spacious recording of:

- personal patient details
- past medical history.
- trauma score
- secondary assessment
- treatments
- observations

Total cards size when unfolded - 15.4 x 6 inches

Individually numbered and bar coded

Can be used with any triage methodology

Detachable transport tag with corresponding number to Smart Tag number / barcode

Held in tough plastic wallet allowing additional storage space for further documentation

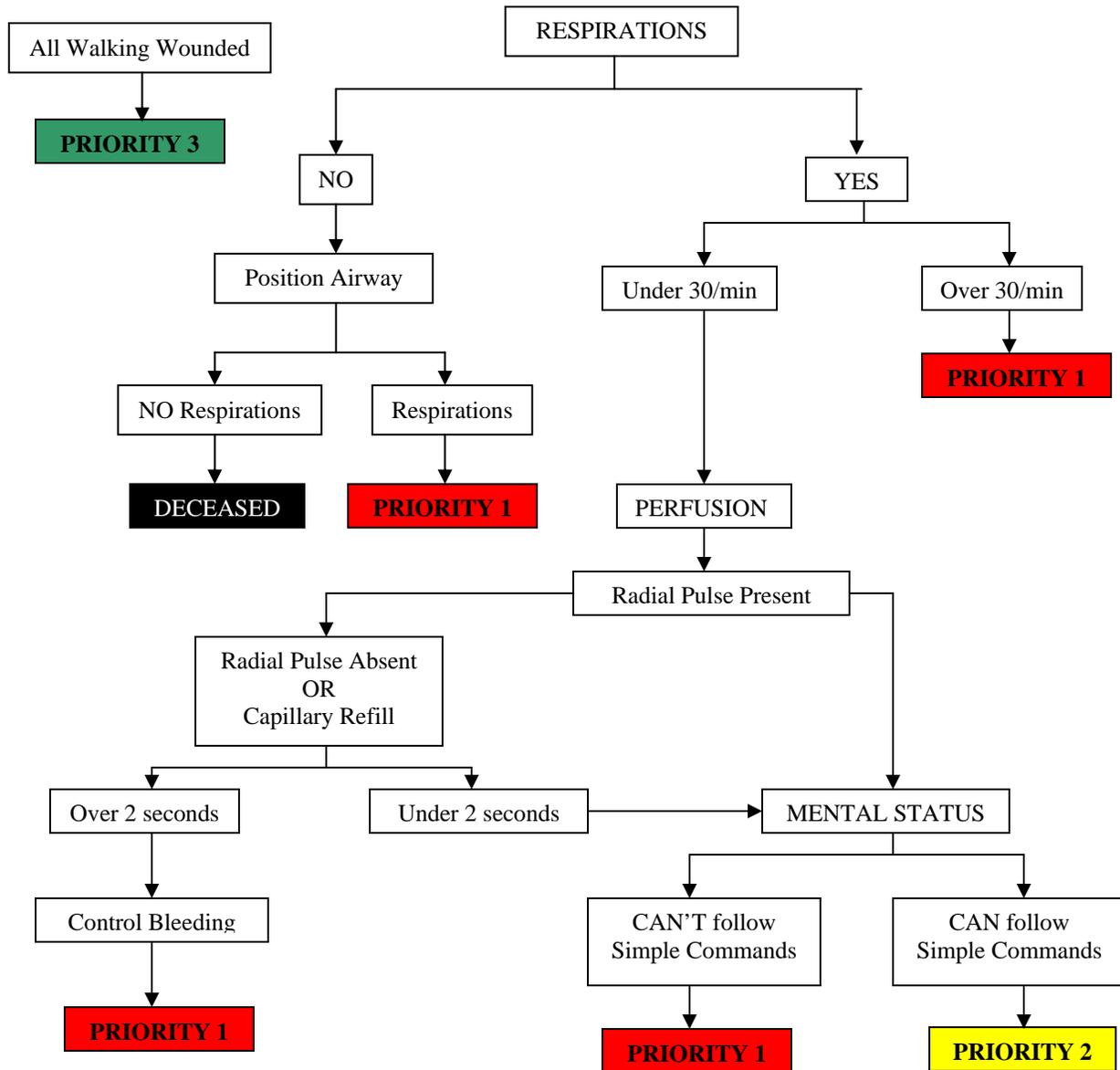
Firmly secured to patient with latex free rubber band, no knots to tie, will not restrict tissue circulation.

Supplied with light sticks to enhance its use in bad light

Can be re-used for training when used in conjunction with solvent pen

SMART TRIAGE DECISION MATRIX

The SMART Triage Method, used by Chester County EMS, is useful for incidents involving a very large number of casualties when your available triage resources are limited.



PERSONNEL ROLES AND RESPONSIBILITIES

EMS GROUP SUPERVISOR

The EMS Group Supervisor is responsible for the overall coordination of EMS activities at the disaster site. These duties shall include:

1. Establishing and identifying a location for the Incident command post **if this has not already been accomplished by other emergency personnel**. The location of such a command post must be transmitted to the communications center for relay to other responding emergency services, (e.g., police, fire, haz-mat). Such a relay of information may be made by a special radio alert tone and announcement of the initiation of a unified command post and its' location.
2. Rapidly assess the scope of the disaster incident, paying particular attention to the following:
 - the nature of the incident.
 - hazards that are present.
 - number of casualties.
 - types and extent of injuries including a rough estimate of the number of casualties present.
 - additional resources that may be required at the scene.
 - responding unit's route of approach to the scene.
 - location(s) for potential staging area(s).
3. Transmit a preliminary report to the communications center for relay to other responding emergency services.
4. Transmit a preliminary report to the Chester County Communications Center so that initial notification of the existence of a mass casualty incident can be made to area hospitals. (Further information as to number and extent of injuries, hospital resources available, etc., can be made as the incident progresses).
5. Establish an EMS communications structure for the disaster scene. This structure may later be relocated to a specialty vehicle, if one is available.
6. Determine if additional response, including the mobilization of regional mass casualty equipment caches, is required at the incident.
 - Assign Leaders:
 - Operations Leader
 - Triage Leader
 - Treatment Leader
 - Transportation Leader

7. Note: It may be necessary to combine the roles of leaders until sufficient manpower is available to fill these positions. Also, dependent upon the “size” of the incident, it may be possible to combine the roles of leaders permanently.
8. Assign medical teams to the Triage or Treatment Sector’s, based on the needs of those sectors.
9. Work in conjunction with the Incident Commander to assign crews to carry and transfer patients to the Patient Collection Station(s).
10. Consult with other Leaders frequently to ascertain the need for additional resources and the safety and well being of all EMS personnel operating at the incident, (to include the provision of rehab and CISM services if necessary). *
11. Establish liaisons with other emergency services agencies operating at the incident.
12. Evaluate the effectiveness of EMS operations and make changes as required and necessary. *
13. Transmit periodic progress reports on EMS Operations to the communications center.
14. Re-assign EMS personnel / units as EMS operations de-escalate. *
15. If necessary, establish a temporary morgue location and coordinate the management of fatalities with the Triage Sector and Coroner of jurisdiction.
16. Maintain documentation as to the overall provision of EMS operations at the incident. *
17. De-mobilize and terminate EMS operations, including the cessation of the EMS Supervisors and Operations. *

*** In conjunction with the EMS Operations Leader in a level 2, 3 and/or 4 response and the Incident Commander and Operations Section Chief.**

EMS GROUP SUPERVISOR CHECKLIST

Position Assigned to: _____

You report to: _____

Command Post is located at: _____

Telephone: _____ **Talk Group:** _____

Functions: Direct and supervise the overall coordination of EMS activities at a disaster or mass casualty incident.

Personnel Assigned: EMT, Paramedic, or PHRN

1. Read this entire checklist
2. Put on position identification vest
3. Assess the situation or obtain briefing from Incident Commander:
 - Incident Type: _____
 - Number of Victims: _____
 - Disaster Level: _____
 - Notify other communications center(s) _____
 - Notify area hospitals: _____
4. If not already done, set up and identify location of command post. If Command post has already been established, identify yourself to the Incident Commander and maintain a presence at the command post.
5. Appoint triage unit leader; treatment unit leader and patient transportation group supervisor
6. Identify equipment and vehicle staging area(s)
7. Request additional resources and manpower if needed
8. Establish medical communications network:
 - Frequency to incident commander or operations section chief _____
 - Frequency to triage unit leader: _____
 - Frequency to treatment unit leader: _____
 - Frequency to Chester County Communications: _____
 - Frequency to hospitals: _____
 - Frequency to other communications center(s): _____
9. Provide periodic updates on EMS operations to the Communications Center(s), the Incident Commander and hospitals
10. Request law enforcement for scene security if needed
11. Request coroner of jurisdiction if necessary
12. If necessary, establish morgue location and coordinate with triage and treatment unit managers and coroner of jurisdiction
13. Re-assign EMS practitioners and providers as EMS operations de-escalate
14. Demobilize and terminate operations including cessation of EMS medical group operations
15. Maintain documentation of overall EMS operations
16. Observe all practitioners and patients working in the EMS operations area for signs of exhaustion, stress, or inappropriate behavior, report concerns to _____
17. Provide for rehab of all working personnel
18. Other:

EMS OPERATIONS LEADER

The EMS Operations Leader is directly responsible to the EMS Supervisor for the coordination and management of EMS related resources at the incident site. Designated by the EMS Supervisor at a Level 2 response and above, the EMS Operations Leader acts as a liaison between the EMS Supervisor and other Leaders / EMS practitioners that are operating at the scene. These duties shall include:

1. Allocating available resources to each area of EMS operations as needed.
2. Frequent consultation with other EMS area Leaders to ascertain the need for additional resources and the safety and well being of all EMS personnel operating at the incident. This shall include ensuring the provision of rehab and CISM services, if necessary.
3. The tracking of available units on location and the availability of other resources within the EMS system.
4. In coordination with the Transport Leader, the tracking and distribution of priority 1, 2 and 3 patients, in relation to the number of patients each facility is willing and/or able to receive.
5. Evaluating the effectiveness of EMS Operations and suggesting changes as deemed necessary.
6. Controlling bi-directional communications between other sectors and the EMS Supervisor in order to allow a free flow of information to and from the scene.
7. Coordinating the distribution of mutual aid resources throughout the EMS system in order to ensure that system integrity is maintained within the affected area.
8. Re-assigning EMS personnel and units as EMS Operations de-escalate.
9. Maintaining documentation as to the overall provision of EMS at the incident
10. In coordination with the EMS Supervisor, demobilization and termination of EMS Operations at the incident site.

EMS OPERATIONS LEADER CHECKLIST

Position Assigned to: _____

You report to: _____

Command Post is located at: _____

Telephone: _____ **Talk Group:** _____

FUNCTIONS: Responsible for the coordination and management of EMS related resources at a multiple casualty incident. The Operations Leader acts as a liaison between the EMS group Supervisor and the other EMS providers on location.

Personnel Assigned: EMT, Paramedics, or other designated personnel as assigned by the EMS group Supervisor.

1. Read this entire checklist
2. Don appropriate identification
3. Obtain situation briefing from EMS Group Supervisor:
 - Type of Incident: _____
 - Number of Victims: _____
 - Disaster Level: _____
4. Verify assignments:
 - Triage Unit Leader: _____
 - Treatment Unit Leader: _____
 - Transport Unit Leader: _____
5. Verify medical communications network: _____
 - Freq. to Command: _____
 - Freq. to Triage Unit Leader _____
 - Freq. to Treatment Unit Leader _____
 - Freq. to Transport Unit Leader _____
 - Freq. to Hospitals: _____
6. Verify location(s) of staging area(s).
7. Allocate available resources to Sector's as needed.
8. Consult with EMS Group Supervisor frequently to ascertain the need for additional resources and the safety as well being of EMS personnel, (including the availability or need for rehab and CISM services).
9. Coordinate with the Transport Sector Officer the patient distribution to medical facilities based on the number of patients the facility is willing and/or able to accept.
10. Verify through Chester County Communications Center and other local communications centers the distribution of mutual aid resources throughout the EMS system to ensure system integrity.
11. Keep EMS Group Supervisor informed/ updated on EMS operations
12. Evaluate the effectiveness of EMS operations and make changes as required.
13. Re-assign EMS personnel/ units as EMS operations de-escalate.
14. In coordination with the EMS Group Supervisor, de-mobilize and terminate operations at the incident.
15. Maintain documentation as to the overall provision of EMS at the incident and forward reports/ records to the EMS Group Supervisor.

TRIAGE UNIT LEADER (as designated by the EMS Supervisor)

The Triage Unit Leader is directly responsible to the EMS Supervisor for the coordination of triage operations at the disaster site. These duties shall include:

1. Assigning medically trained personnel to assist in carrying out the triage of patients, to include the proper tagging of patients based upon their condition and the administration of basic care that would correct immediate life-threatening problems, (e.g., airway problems or severe bleeding).

Triage normally occurs at the immediate site, or impact area, of the incident. However, safety concerns for the patients and medical personnel may force triage to be performed in an area adjacent to this site or at the Patient Collection Stations. Should this be the case, coordination with the Treatment Leader and EMS supervisor is imperative.

2. Obtaining an actual total victim count and an approximate victim count for each triage priority category. This information shall be immediately communicated to the EMS Group Supervisor and/or the EMS Operations Leader.
3. Ensuring that an adequate number of personnel and equipment is available for the triage and primary treatment of patients. Personnel and equipment needs shall be communicated to the EMS Supervisor and/or the EMS Operations Leader.
4. Ensuring that an adequate number of personnel and equipment is available to remove patients from the triage area to the Patient Collection Stations. Personnel and equipment needs shall be communicated to the EMS Supervisor.
5. Coordinating operations within the Triage area with other leaders and incident command, as needed.
6. Maintaining documentation as to the operations within the Triage area.
7. Providing the EMS Group Supervisor and/or EMS Operations Leader with updates as to the operations within the Triage area. This shall include timely notification to the EMS Group Supervisor when all of the patients have been triaged and moved to the Patient Collection Stations.
8. Coordinating with the EMS Group Supervisor and the Coroner of jurisdiction, the management of fatalities. This may include the designation of a temporary morgue location.
9. Terminating, with consensus from the EMS Group Supervisor and/or the EMS Operations Leader within the Triage area and re-assigning personnel as directed by the EMS Group Supervisor.

TRIAGE UNIT LEADER CHECKLIST

Position Assigned to: _____

You report to: _____

Located at: _____

Telephone: _____ **Talk Group:** _____

Functions: Coordinate and direct the triage and tagging of all victims of a disaster or multiple casualty incidents.

Personnel Assigned: Paramedic, PHRN, EMT, or other designated personnel as assigned by the EMS Group Supervisor.

1. Read this entire checklist
2. Put on position identification vest
3. Obtain situation briefing from Medical Group Supervisor:
 - Incident Type: _____
 - Number of Victims: _____
 - Disaster Level: _____
4. Verify Medical Communications Network:
 - Medical Group Supervisor: _____
 - Patient Transport Group Supervisor: _____
 - Treatment Unit Leader: _____
5. Obtain an actual victim count, count for each triage priority, and provide this information to the Medical Group Supervisor
6. Assign medically-trained personnel to triage patients, including proper tagging based upon condition and administration of basic life-saving care
7. Ensure that there is adequate manpower and supplies available for the primary triage of all victims. Communicate practitioner and supplies needs to the Medical Group Supervisor (Rule of Thumb: 1 practitioner for every 5 victims)
8. Ensure that there is an adequate number of practitioners and equipment available to remove patients from the triage area to the patient treatment areas. Communicate manpower and equipment need to EMS Group Supervisor
9. Coordinate interaction between triage teams and extrication teams with the Rescue/Extrication Group Supervisor.
10. Assign re-triage team(s) at the entrance to Patient Treatment Area(s)
11. Provide to the Treatment Area Manager and Patient Transportation Group Supervisor the total number of victims and the number of victims in each triage priority.
12. Provide updates to EMS Group Supervisor on triage operations. Include timely notification when all patients have been triaged and when all patients have been moved to the Patient Treatment Area(s).
13. Coordinate with EMS Group Supervisor and the Coroner of jurisdiction the location of any deceased patients and location of morgue area, if needed.
14. Document, and if possible, mark the location of remains that had to be moved in an effort to extricate and treat surviving patients.
15. Request through the EMS Group Supervisor, Law Enforcement for security of area.
16. Assign personnel as necessary

17. Verify with the Patient Transportation Group Supervisor, the final number of victims in order to accurately determine that all victims have been accounted for.
18. Terminate triage unit in conjunction with the Medical Group Supervisor. Re-assign personnel as directed.
19. Maintain documentation of overall triage operations.
20. Observe all personnel in the triage area for signs of exhaustion, stress or inappropriate behavior. Report concerns to _____.
21. Provide for rehab for all personnel in the triage area.
22. Other:

TRIAGE TEAM MEMBER CHECKLIST

Position Assigned to: _____
You report to: _____
Located at: _____
Telephone: _____ Talk Group : _____

Functions: Responsible for initial victim triage, evaluation and priority designation at a multiple casualty incident.

Personnel Assigned: Paramedic, PHRN, EMT or other medically trained practitioners as assigned by the Triage Unit Leader.

1. Read this entire checklist.
2. Secure an adequate supply of triage tags with strings attached or obtain triage kit
3. Secure proper pen or pencil to indicate appropriate information on triage tags.
4. Provide only basic care that would correct immediate life-threatening problems; e.g. opening an airway, controlling severe bleeding.
5. Secure triage tags loosely around patient's neck.
6. Report total number of victims triaged and number of each priority to Triage Unit Leader.
7. Report any concerns or special situations to the Triage Unit Leader.
8. Report to Triage Unit Leader when assignment is complete.
9. If assigned to Re-Triage Area at the Patient Treatment Area(s).
10. Assure that all patients entering the Patient Treatment Area(s) have been triaged and that the tags have been appropriately placed.
11. Verify that the patient priority is consistent with their injuries, re-prioritize as needed.
12. Provide updates on triage to Triage Unit Leader.
13. Observe all personnel in the triage area for signs of exhaustion, stress or inappropriate behavior. Report concerns to Triage Unit Leader.
14. "Grossly Decontaminated" Patients must be marked as such on the anatomy section of the triage tag and placed on the patient.
15. "Completely Decontaminated" patients must be marked as such on the anatomy section of the triage tag and placed on the patient.
16. Other.

LEADER TREATMENT UNIT (designated by the EMS Supervisor)

The Treatment Unit Leader is directly responsible to the EMS Group Supervisor for coordinating the treatment of victims at patient collection stations. These duties shall include:

1. Establishing and identifying Patient Collection Stations and communicating their location to the EMS Group Supervisor and/or the EMS Operations Leader.
 - This area must be large enough to accommodate the anticipated number of patients that could be received.
 - This area should be marked, by flags or markers color coded to match the patient triage tag, (Red - immediate, Yellow - moderate, Green - delayed).
2. Establishing an area adjacent to the Patient Collection Stations for those individuals that have been involved in an incident but have sustained no apparent injuries. Non-injured individuals that subsequently complain of injuries or illness may be re-triaged and moved to the appropriate Patient Collection station.
3. Ensuring that an adequate amount of equipment, supplies and medically trained personnel, both BLS and ALS, are available at the Patient Collection Station to provide appropriate treatment for all patients. Equipment, supplies and personnel needs shall be communicated to the EMS Group Supervisor and/or the EMS Operations Leader.
4. Ensuring that patients arriving at the Patient Collection Stations have been triaged and that they are separated by priority. Non-triaged patients must be assessed and tagged before being moved to the appropriate Patient Collection Station.
5. Remember, when placing patients in the Patient Collection Stations, adequate space must be provided between patients to allow working room for medical personnel.
6. Ensuring that all patients receive treatment that is appropriate for their condition and that is within established state and regional medical protocols.
7. Coordinating the activities of ALL medical personnel in the Treatment area, (physicians, nurses, flight team members, etc.).
8. Ensuring the continual assessment and, where necessary, re-triaging of patients within the Patient Collection Stations.
9. Determining the transport priorities of patients within the Patient Collection Stations and coordinating their movement with the Transportation Leader.
10. Coordinating operations within the Treatment area with other leaders and command, as needed.

11. Maintaining documentation as to the operations within the Patient Collection Stations.
12. Providing the EMS Group Supervisor and/or the EMS Operations Leader with updates as to the operations within the Patient Collection Stations. This shall include timely notification as to when all of the patients have been transported from the Patient Collection Stations.
13. Terminating, with consensus from the EMS Commander and/or the EMS Operations Leader, operations within the Patient Collection Stations and re-assigning personnel as directed.

TREATMENT UNIT LEADER CHECKLIST

Position Assigned to: _____
You report to: _____
Located at: _____
Telephone: _____ Talk Group : _____

Functions: Coordinate and direct the treatment of patients in the patient treatment area(s).

Personnel Assigned: Paramedic, PHRN, EMT, or other designated personnel as assigned by the Medical Group Supervisor.

1. Read this entire checklist
2. Put on position/identification vest
3. Obtain incident briefing from Medical Group Supervisor:
 - Incident Type: _____
 - Number of Victims: _____
 - Disaster Level: _____
4. Medical Communications Network:
 - Medical Group Supervisor: _____
 - Triage Unit Leader: _____
 - Patient Transportation Group Supervisor: _____
5. Establish and identify Patient Treatment Area(s) and communicate their location to the Medical Group Supervisor.
6. Designate the immediate Treatment Manager, Delayed Treatment Manager and the Minor Treatment Manager.
 - Immediate. Marked with Red Identifier: _____
 - Delayed. Marked with Yellow Identifier: _____
 - Minor. Marked with Green Identifier: _____
7. Assign medically-trained practitioners to patient treatment areas.
8. Communicate the need for "standing orders" for ALS personnel to the Medical Group Supervisor.
9. Ensure an adequate number of ALS and BLS practitioners is available to provide treatment to all victims. Communicate the need for additional resources to the Medical Group Supervisor.
10. Insure that all patients brought to the Patient Treatment Areas have been triaged and separated by condition priority.
11. Establish an area for non-injured patients.
12. Coordinate operations within the Patient Treatment Area(s) with the Medical Group Supervisor, Triage Unit Leader and the Patient Transportation Group Supervisor.
13. Provide updates on the Treatment Operations, including notification when all patients have been removed from the Patient Treatment Areas.
14. Maintain documentation on operations within the patient treatment areas.
15. Terminate patient treatment areas for conjunction with the Medical Group Supervisor. Re-assign personnel as directed.
16. Observe all personnel in the patient treatment area(s) for signs of exhaustion, stress, or inappropriate behavior. Report concerns to: _____.
17. Other:

TREATMENT TEAM MEMBER CHECKLIST

Position Assigned to: _____
You report to: _____
Located at: _____
Telephone: _____ Talk Group : _____

Functions: Responsible for the treatment of all patients in the Patient Treatment Area(s), as assigned by the Treatment Unit Leader.

Personnel Assigned: Paramedic, HPRN, EMT, First Responder, Physicians, Nurses or other medically trained personnel as assigned by the Treatment Unit Leader.

1. Read this entire checklist
2. Work in assigned Patient Treatment Area.
3. Provide treatment to patients that are consistent with the scope of practice for the practitioner.
4. Obtain patient vital signs and legibly record them on the triage tag around the patient's neck.
 - Time vital signs taken
 - Lung sounds
 - Pulse
 - Respirations
 - BP
 - Level of consciousness by A.P.V.U. scale.
5. Legibly record other pertinent patient information on the triage tag:
 - Patient name (if it can be obtained)
 - Age, approximate if cannot be obtained)
 - Sex
 - Any treatment provided
 - Indicate area of patient's primary injury(s) on anatomical diagram.
 - Any other information deemed important; e.g. significant past medical history.
6. Communicate changes in patient's status that may require a change in their transport priority to the Treatment Unit Leader or Treatment Manager; e.g. Immediate Treatment Manager.
7. Prepare patients for transport to medical and specialized treatment facilities.
8. Observe all personnel in the treatment areas for signs of exhaustion, stress, or inappropriate behavior. Report concerns to _____.
9. Other:

REFERENCE FOR TREATMENT TEAM

PRIORITIES OF PATIENTS AT COLLECTION STATIONS

UNINJURED - WHITE TAG

An area adjacent to the disaster site should be established for those “patients” that have been involved in a disaster but have sustained no injuries. Non-injured individuals that subsequently complain of injuries may be re-triaged and moved to the appropriate patient collection station.

PRIORITY 1 PATIENT - RED TAG

Serious injuries that have life-threatening implications or will become life threatening due to shock and/or hypoxia; are capable of being stabilized; require constant care and are given a high probability of survival if given immediate care and prompt transportation to an appropriate medical facility. Injured co-workers and patients with uncontrolled emotional disorders are also placed in this priority.

PRIORITY 2 PATIENT - YELLOW TAG

Serious injuries which are not yet life threatening; no severe shock or hypoxia; high probability of survival and can withstand delayed transport until most red tagged patients have been stabilized and/or transported. These patients should also be transported to an appropriate medical facility.

PRIORITY 3 PATIENT - GREEN TAG

Minor injuries without systemic implications and can withstand delayed transport until most priority 1 and 2 patients have been stabilized and/or transported.

NOTE: Consideration should be given to having these patients transported to one or more hospital(s) which is/are more distant from the disaster scene than other hospitals(s) and which will probably not be receiving several Priority 1 or 2 patients. This will prevent the unnecessary taxing of any one hospital’s resources.

DECEASED PATIENT - BLACK TAG

Deceased patient(s) should not be moved unless necessary to access or treat surviving victims. If it becomes necessary to move a deceased victim then the location and position that the deceased was found in must be noted in order to assist in identification and/or further investigation.

TRANSPORTATION LEADER (designated by the EMS Group Supervisor)

The Transportation Sector Officer is directly responsible to the EMS Supervisor for coordinating the transportation of victims to appropriate medical facilities in an expeditious manner. These duties shall include:

1. Establishing and identifying ambulance staging / transportation areas that are easily accessible from the Patient Collection Stations. Access and egress must be taken into account and the location shall be communicated to the EMS Commander. This may also require, at times, establishing a helicopter-landing zone in coordination with the Fire Commander.
2. Determining the treatment capabilities, “beds available”, of receiving hospitals within the area of the disaster.
3. Determining the transportation needs for the potential number of patients that will be treated at the Patient Collection Stations. Coordination with the Triage and Treatment Leaders to obtain exact numbers is suggested.
 - In determining the transportation needs, keep in mind, non-EMS forms of transportation, e.g. school buses to transport large numbers of minor injuries.
4. Accepting patients from the Patient Collection Stations and assigning them to vehicles, ground transport OR aeromedical, for transportation to appropriate receiving facilities. The Transportation Leader will designate which facility the patient(s) are to be transported too.
 - In Mass Casualty Incidents, effective utilization of available EMS transportation resources is critical. As such, multiple patients should be assigned to EMS vehicles that are transporting to facilities. For every priority 1 patient assigned to a transporting EMS unit, at least 1 priority 2 or 2 priority 3 patients should also be assigned to that unit for transport, (keeping in mind what sort of immobilization devices have been applied).
5. Communicating with receiving facilities about an ambulance vehicle’s ETA to that facility, the number of patients on-board that unit, the priority of the patient(s), their triage tag number, and their primary injuries.
6. Maintaining a written record of: each patients priority, primary injury, disaster tag number, emergency vehicle assigned to transport the patient, hospital facility to which the patient was sent, and the time the patient left the scene.

TRANSPORTATION LEADER CHECKLIST

<p>Position Assigned to: _____</p> <p>You report to: _____</p> <p>Command Post is located at: _____</p> <p>Telephone: _____ Talk Group : _____</p>

Functions: Coordinates the transportation of patients to medical and specialized treatment facilities.

Personnel Assigned: EMT, Paramedic, or other person as designated by the EMS Supervisor.

1. Read this entire checklist
2. Put on position identification vest
3. Obtain situation briefing from EMS Supervisor.
 - Assess situation
 - Location of Patient Collection Station(s)
 - Ambulance vehicle access
 - Ambulance vehicle egress
 - Establish ambulance staging area.
 - Establish ambulance "loading" area.
4. Verify medical communications network:
 - EMS Operations Officer: _____
 - Freq. to Triage Leader: _____
 - Freq. to Treatment Freq. to Command: _____
 - Freq. to Leaders: _____
 - Freq. to Hospitals: _____
5. Determine the treatment capabilities and "beds available" of receiving facilities within the area of the disaster. It is recommended that MEDCOM be utilized for this task.
6. Coordinate with the Triage and Treatment Leaders to determine the transportation needs for the potential number of patients that will be treated at the Patient Collection Station(s).
7. Coordinate with the Incident Commander for the establishment of a landing zone for aeromedical providers.
8. Consider alternate means of transportation for large numbers of class III patients, e.g. school buses, wheel chair vans, etc.
9. Request ambulances from staging area as needed.
10. Accept patients from the Patient Collection Station(s) and assign them to ground transport **OR** aero medical providers for transportation to appropriate receiving facilities.
11. Provide communications report to receiving facilities on each patient transported.
 - Patients priority.
 - Primary injury(s).
 - Triage tag number.
 - Transporting unit.
 - Time unite departed scene enroute to facility
12. Complete and maintain the bottom portion of each patients triage tag as a record of the patients' transportation.

13. Ensure that an adequate number of transport capable vehicles is available. Communicate vehicle or manpower needs to the EMS Supervisor and/or the EMS Operations Leader.
14. Maintain record of operations within the Transportation Leader through the use of the Transportation Leader Patient Status Sheet.
15. Verify the final patient count with the Triage and Treatment Leaders in order to accurately determine whether all patients have been accounted for and transported from the scene.
16. Provide the EMS Supervisor and/or the EMS Operations Leader with updates on operations within the Transportation area, including notification when all patients have been received from the Patient Collection Station(s) and transported from the scene.
17. Terminate, with consensus from the EMS Supervisor and/or the EMS Operations Leader, operations within the Transportation area.

PATIENT DISTRIBUTION TO MEDICAL FACILITIES

Patients from a large-scale disaster/mass casualty incident should be distributed among several hospital facilities to ensure that they will receive rapid care and prevent the unnecessary taxing of any one hospital's resources.

Priority 1 Patients (Red Tag) should be distributed to as many appropriately categorized hospitals as possible, with the majority of these patients going to designated trauma centers when possible.

Patients should be assigned by the Transportation Leader to hospital facilities classified by the Chester County EMS Council as having the capability to manage the patient(s)' condition(s). The Transportation Group Supervisor should therefore be familiar with the Chester County EMS Triage Guidelines and Hospital Classifications.

All patients assigned from the scene should be logged on flow sheets

NOTE: All hospitals within Chester County can treat cardiac emergencies and injured patients who are ambulatory.

SAMPLE DISTRIBUTION DISASTER SCENE TRAUMA PATIENT DISTRIBUTION PLAN (32 TRAUMA PATIENTS) ¹

Closest Trauma Center	Secondary Trauma Center	Nearest Hospital	Secondary Hospital
4-Red Tags 2- Yellow Tags	2-Red Tag 1-Yellow Tag 5-Green Tags	1-Red Tag 1-Yellow Tag 5-Green Tags	1-Yellow Tag 10-Green Tags

While this document is aimed toward a mass casualty incident involving traumatic injuries, it is intended and expected to be followed in the event of an incident involving numerous victims suffering from medical, chemical, radiological biological or nuclear causes.

¹ Specialized tertiary care centers, i.e., burn centers, spinal cord injury centers, and pediatric centers should be utilized where appropriate.

HAZARDOUS MATERIALS

HAZMAT- any material that hurts or harms what it comes in contact with. Examples: Explosives, Gasses, Flammable liquids/solids, Oxidizers and Organic Peroxides, Toxic And Infectious Materials, Radioactive, Corrosives, Miscellaneous Dangerous Goods.

First responders at the awareness level are those who, in the course of their normal duties, may be the first on the scene of an emergency involving hazardous materials.

First responders at the awareness level, according to the standard, are expected to do these things :

- ▶ Recognize and identify the presence of hazardous materials
- ▶ Protect themselves
- ▶ Call for trained personnel
- ▶ Secure the area.

First responders at the operational level are those who respond to releases or potential releases of hazardous materials as part of the initial response to the incident for the purpose of protecting nearby persons, the environment, or property from the effects of the release.

They are trained to respond in a defensive fashion to control the release from a safe distance and keep it from spreading.

The operations level; according to the standards, are expected to do these things:

- ➔ Analyze a hazardous materials incident to determine the magnitude of the problem by predicting the likely behavior of a material and its container and by estimating the potential harm of an incident.
- ➔ Plan an initial response within the capabilities and competencies of available personnel, personal protective equipment, and control equipment.

Hazardous Materials Protocol

Scene Safety

1. No Practitioner will be allowed in the Warm or Hot Zone without PPE.
2. Identify material with Incident commander and hazmat officials.

Decontamination

1. All patients must be DECONED prior to treatment/transport.
2. If the Decontaminated patient comes in contact with equipment or crew, both must be DECONED.
3. Patients from Mass Casualty Incidents may only be grossly DECONED to improve time to definitive care.
4. All information involving the number of patients and their status of DECON must be reported to the receiving hospital or transport officer during an MCI.

Command and Notification

1. EMS activities must follow the NIMS and Incident Command System.
2. Contact Medical Command, EMS Council, and Local and County EMA offices.

Hazardous Material Guidelines

INDICATORS

- Is there a hazardous spill
- Are there multiple (non-trauma related) victims?
- Are responders victims?
- Are hazardous substances involved with placard?
- Has there been an explosion?
- Are there any visible materials?
- Is there any Tractor Trailer, Railcars, or aircraft involved?

PROTECT YOURSELF

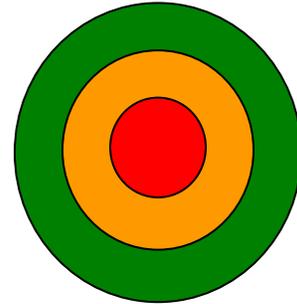
- **Consider a secondary device**
- **Do not get contaminated!**
- Stay uphill and upwind (500-1000ft away)
- Consider weather conditions
- Always have a way out – escape route
- Isolate area and deny entry
- Wear proper personal protection equipment to your level of training
- Stay alert for actions against responders
- Always work in pairs (2 in – 2 out)
- Patients who only have been grossly DECONED- Special Training.

INCIDENT COMMAND

- Establish unified command or assume your appropriate roles
- Don't forget the rest of the Disaster Operating Guidelines

SCENE CONSIDERATIONS

- Assess decontamination requirements
- (Do your patients have to be decontaminated?)
- Crime scene/security
- Locations of the command post, treatment, triage, transport, and staging areas (keep them safe – uphill and upwind, usually in cold zone)
- Public evacuations or shelter in place
- Consider an area of safe refuge



Hot Zone:
Requires HazMat Technician level training.

Warm Zone:
Requires HazMat Operations level training.
Contains Decon area.

Cold Zone:
No specialized training.
Generally contains personnel, equipment, command post.
EMS located in this area with triage, treatment, and transport.

RESOURCES

*North American
Emergency Response
Guidebook*

*NIOSH Pocket
Guide*

BIO Terry manual

WEAPONS OF MASS DESTRUCTION GUIDELINES

INDICATORS

- Is the response to a target hazard or target event?
- Has there been a threat?
- Are there multiple (non-trauma related) victims?
- Are responders victims?
- Are hazardous substances involved?
- Has there been an explosion?

PROTECT YOURSELF

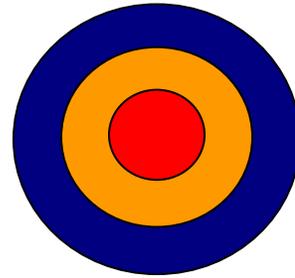
- **Consider a secondary device**
- **Do not get contaminated!**
- Stay uphill and upwind
- Consider weather conditions
- Always have a way out – escape route
- Isolate area and deny entry
- Wear proper personal protection equipment to your level of training
- Stay alert for actions against responders
- Always work in pairs (2 in – 2 out)

INCIDENT COMMAND

- Establish unified command or assume your appropriate roles
- Don't forget the Disaster Operating Guidelines

SCENE CONSIDERATIONS

- Assess decontamination requirements (Do your patients have to be decontaminated?)
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- Locations of the command post, treatment, triage, transport, and staging areas (keep them safe – uphill and upwind)
- Public evacuations or shelter in place
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Hot Zone:

Requires HazMat Technician level training.

Warm Zone:

Requires HazMat Operations level training.
Contains Decon area.

Cold Zone:

No specialized training.
Generally contains personnel, equipment, and the command post.

RESOURCES

North American Emergency Response Guidebook

Nerve Agents
153

Blister Agents
153

Blood Agents
117, 119, 125

Choking Agents
124, 125

Irritant Agents
153, 159

NIOSH Pocket Guide

BIO Terry manual

Jane's Chem-Bio Handbook

WEAPONS OF MASS DESTRUCTION REFERENCE

The following Weapons of Mass Destruction (WMD) Reference is intended to act only as a reference! It does not replace the need for education and training. It is also recommended that you participate with the Regional Counter Terrorism Taskforces and you're local and county EMA. There are many references that are available to you at low or no cost that would be beneficial at the time of a WMD Incident:

- The Bio Terry Manual
- The Department of Transportation Emergency Response Guidebook (current edition)
- The NIOSH Pocket guide to Chemical Hazards
- Jane's Chem-Bio Handbook
- Jane's /unconventional Weapons Handbook
- U.S. Fire Academy's Hazardous Materials Guide for First Responders

Additional resources can also be found on the following web sites:

- Federal Emergency Management Agency (www.fema.gov)
- U.S. Department of Homeland Security (www.dhs.gov)
- U.S. Office of Domestic Preparedness
- U.S. Fire Administration (www.usfa.fema.gov)
- Pennsylvania Emergency Management Agency (www.pema.state.pa.us)
- Pennsylvania Department of Health (www.health.state.pa.us/ems)

PATIENT AND EQUIPMENT DECON GUIDELINES

DECON MUSTS!

- OSHA 1910.120 requires specialized training for response to hazardous materials.
- A HAZMAT incident will be structured with a HOT, WARM and COLD zone.
- EMS Operations at a HAZMAT incident will occur in the COLD zone.
- Only if EMS has been trained to the HAZMAT Operation level will they participate in decontaminating patients or caring for patients in the WARM zone.
- OSHA 1910.120 mandates the use of the Incident Command System. Assume your role!
- Notify 911 Center of the incident to ensure that hospitals are notified and prepared to receive patients.

MASS CASUALTY PATIENT DECON:

- If a State Certified Hazardous Materials Team is on scene follow their direction for mass decon
- If properly trained EMS personnel are participating in gross decon and/or transporting patients who have been only grossly decontaminated, proper PPE must be worn.
- Any patient who was exposed to ANY hazardous material MUST be, at least, grossly decontaminated.
- Proper gross decon should consist of:
 - Removal of the patients clothing.
 - Patients are flushed with copious amounts of water.
 - Patients are covered with clean sheets, blankets, tyvek sheets, etc...or placed in a tyvek or equivalent suit.
 - Patients are placed on litter or backboard and covered again with any of the above.
 - The patients decon status must be reported to the receiving facilities.
- “GROSS DECON” should be written on the anatomy section of a triage tag and placed on the patient.
- Ambulance and other equipment that contacts the patient must be decontaminated or properly disposed of (equipment).

ONE OR FEW PATIENTS DECON:

- If a state certified Hazardous Materials Team is on scene follow their direction for a complete full decon.
- If the patient is critically injured/ill the patient can be grossly deconed to reduce the time to definitive care.
- Complete full decon should consist of:
 - Removal of patients clothing
 - Entire patient is washed with at least soap and water. The entire patient consists of head to toe washing including all skin folds, fingernails, the soles of feet, etc.
 - The patients decon status must be reported to the receiving facilities.
- Patients should be packaged modestly and transported to the receiving facility.
- “COMPLETELY DECONED” should be written on the anatomy section of a triage tag and placed on the patient.

CRITICAL INCIDENT STRESS MANAGEMENT TEAM

CISM Liaison

The CISM Coordinator will serve to monitor and assess the signs and symptoms of stress, either personally or through other team members, and make recommendations to the Incident Commander as to the appropriate management of such signs and symptoms. Further, the CISM Coordinator will facilitate mobilization of team members to activations within the Chester County team and, if need be, arrange for assistance of other teams through the International Critical Incident Stress Foundation (ICISF) and/or other locales.

Qualification: CISM Coordinator or designated senior team member
Commanded by: Safety Officer
Subordinates: CISM Team members

In any mass casualty incident, there is the potential for emergency responders to become victims. Psychological and/or emotional problems may develop during or after the incident, which will require the attention of specialists in the field of Critical Incident Stress Management (CISM). In Chester County, this function is assigned to the Chester County Critical Incident Stress Management Team. The CISM Liaison shall identify and obtain contact and supervisory information of all agencies responding in any way to the incident.

The CISM Team can provide the following services:

1. Contact the International Critical Incident Stress Foundation (ICISF) to assist in the mobilization of additional CISM support services for both short-term and long-term crisis management.
2. Observing personnel and conditions for signs of stress, and intervening on their behalf with psycho-education.
3. Demobilizations may be provided in large groups to inform and consult, allow psychological decompression, and stress management at the time of the shift disengagement. Activation of demobilizations is event driven.
4. Crisis Management Briefings (CMB) may be provided in large groups to inform and consult, allow psychological decompression, and stress management any time post-crisis. Activation of CMBs is event driven.
5. Defusing may be provided in small groups to mitigate symptoms, provide closure and/or triage. Activations of defusing are usually symptom driven.
6. Critical Incident Stress Debriefing (CISD) may be provided in small groups to facilitate psychological closure, mitigate symptoms, and/or triage. Activation of CISDs is usually symptom driven, but may also be event driven.
7. Individual Crisis Intervention (1:1) may be provided to individuals to mitigate symptoms, assist in the return to function, and/or provide referrals when necessary on an as-needed basis. Individual crisis intervention is symptom driven.
8. Follow-up/Referral may be provided to individuals to assess mental status and/or access a higher level of care, if needed any time. Follow-up/Referral is usually symptom driven.

9. Co-ordinate effort with the Emergency Services Liaison within Chester County's Mental Health Disaster Plan (610/918-2100).

The CISM Team is available 24-hours a day through the Emergency Communication Center, CISM pager (888/608-0396) or through the Team Coordinator (610/344-5021). For further information, contact the shift supervisor in the communications center. The Incident Commander may request the services of the team at any time during or after the incident; however, it is recommended that notification be made as early as possible to allow for timely mobilization of the team.

DEFINITIONS

Advanced Life Support (ALS) - The level of emergency medical care that utilizes basic life support measures, invasive medical procedures and drug therapy.

Ambulance - Any vehicle that is specifically designed, constructed or modified and equipped, and is used or intended to be used, and is maintained or operated for the purpose of providing emergency medical care to and transportation of patients.

Basic Life Support (BLS) - The level of emergency medical care that involves maintenance of the patient's airway, breathing and circulation. This level of care also includes basic bandaging and splinting of traumatic injuries.

Clear Text - The use of "plain English" in radio communications transmissions. Ten codes or agency specific codes are not used when using Clear Text.

Command - The act of directing, ordering and/or controlling resources by virtue of explicit legal, agency or delegated authority.

Complete Decontamination- Also known as full decon. The removal of hazardous substances from victims, emergency response personnel and their equipment in order to avoid all foreseeable adverse health affects.

Disaster - An event, either natural or man-made, that is characterized by loss of human property, loss of human life, a potential for large number of injuries, separation of family members and an overall disturbance of routine operating procedures.

Dispatch Center - A facility from which resources are directly assigned to an incident.

EMS Group Supervisor - The individual that is responsible for the overall coordination of all EMS activities at a disaster scene.

EMS Operations Leader - The individual that is responsible for the coordination and management of EMS related resources at a multiple casualty incident. The Operations Leader acts as a liaison between the EMS Supervisor and other EMS practitioners on location.

Gross Decontamination- The process of removing large quantities of material from a surface area, significantly reducing the contaminant.

Impact Area - The immediate area of an incident scene where the patients received their injuries and they were initially found.

Incident Commander - The individual responsible for the management of all operations at a disaster scene.

Mass Casualty Incident - An emergency incident involving the injury and/or death of a number of patients beyond what the jurisdiction is routinely capable of handling. Also called Multiple Casualty Incident or Multiple Patient Incident.

Morgue - An area on or near the incident site that is designated for the temporary placement of deceased victims.

National Incident Management System (NIMS)- NIMS is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines.

Patient Collection Station (PCS) - A specific area, designated by the Treatment Officer, for the collection and treatment of patients' prior to transport to a medical facility.

Post Incident Review - A reconstruction of an incident to assess the chain of events that took place, the methods used to control the incident and how the actions of emergency personnel contributed to the eventual outcome.

Priority Treatment Area - An area of the Patient Collection Station specifically designated for PRIORITY 1, PRIORITY 2 and PRIORITY 3 patients.

Rehab Services - Services provided at a disaster for the rest, nourishment and hydration of ALL emergency workers.

Resources - All personnel and major items of equipment available, or potentially available, for assignment to incident tasks on which status is maintained.

Staging Area - An area where personnel and equipment are initially assigned to respond to and await further assignment.

Transportation Unit Leader - The individual that is responsible for communicating with sector officers and hospitals in order to manage the transport of patients to hospitals from the scene of the disaster.

Transportation Assistant - An individual that assists the Transportation Unit Leader in the performance of his/her duties.

Treatment Unit Leader - The individual that is responsible for overseeing activities conducted within the patient collection station. These activities will include ensuring that an adequate amount of equipment and personnel are present to provide both basic and advanced care.

Treatment Team Members - Individuals responsible for treatment of patients in priority treatment areas, as assigned to by the Treatment Sector Officer.

Triage - Sorting or categorizing victims of a disaster into priority categories based on the severity of injuries.

Triage Leader - The individual that is responsible for overseeing triage at a disaster scene. This individual is also responsible for the establishment and maintenance of a triage team(s).

Triage Team Members - Individuals that are responsible for assisting in the initial triage evaluation and priority designation of victims of a mass casualty incident, as assigned by the Triage Sector Officer..

Unified Command Structure - A structure that allows for all agencies with jurisdictional responsibility to contribute to the planning, strategy, objectives and mitigation of a disaster.

FORMS LIST:

INCIDENT RADIO COMMUNICATIONS PLAN
DISASTER AND MCI LOG FORM
INCIDENT WORKSHEET
INCIDENT SKETCH
RESOURCES SUMMARY WORKSHEET
HOSPITAL RESOURCE AVAILABILITY
UNIT LOG

DISASTER AND MCI LOG FORM

Date:

Incident:

0100	
0200	
0300	
0400	
0500	
0600	
0700	
0800	
0900	
1000	
1100	
1200	

DISASTER AND MCI LOG FORM

Date:

Incident:

1300	
1400	
1500	
1600	
1700	
1800	
1900	
2000	
2100	
2200	
2300	
0000	

INCIDENT WORKSHEET

CURRENT OBJECTIVES:		
CURRENT ACTIONS:		
INCIDENT NAME:	DATE:	TIME:

INCIDENT SKETCH

INCIDENT NAME:

DATE PREPARED:

TIME PREPARED:

PREPARED BY (NAME AND POSITION)

HOSPITAL RESOURCE AVAILABILITY
INCIDENT NAME:

DATE:

HOSPITAL		PRIORITY 1	PRIORITY 2	PRIORITY 3
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			
	A			
	U			

A = AVAILABLE U = USED

Secrela/JY
u.s. Department of Homeland Security
Washington, DC 20528



Homeland
Security

March 1, 2004

MEMORANDUM FOR: Cabinet Secretaries
Agency Directors
Members of Congress
Governors
Mayors
County, Township, and Parish Officials
State Homeland Security Advisors
Homeland Security Advisory Council
State, Territorial, Local, and Tribal First Responders

FROM: Tom Ridge

SUBJECT: National Incident Management System

In Homeland Security Presidential Directive (HSPD)-5, *Management of Domestic Incidents*, the President directed me to develop, submit for review to the Homeland Security Council, and administer a National Incident Management System (NIMS). This system will provide a consistent nationwide approach for Federal, State, local, and tribal governments to work effectively and efficiently together to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.

The NIMS has undergone extensive vetting and coordination within the Federal family. The development process has also included extensive outreach to State, local, and tribal officials; to the emergency response community; and to the private sector. As a result, the NIMS incorporates the best-practices currently in use by incident managers at all levels. In addition, effective incident management in the homeland security environment we now face involves new concepts, processes, and protocols that will require additional development and refinement over time. The collective input and guidance from all of our homeland security partners has been, and will continue to be, vital to the further development of an effective and comprehensive NIMS.

HSPD-5 requires all Federal departments and agencies to adopt the NIMS and to use it in their individual domestic incident management and emergency prevention, preparedness, response, recovery, and mitigation programs and activities, as well as in support of those actions taken to assist State, local, or tribal entities. The directive also requires Federal departments and agencies to make adoption of the NIMS by State, tribal and local organizations a condition for Federal preparedness assistance beginning in FY 2005. Compliance with certain aspects of the NIMS will be possible in the short-term, such as adopting the basic tenets of the Incident Command System identified in this document. Other aspects of the NIMS, however, will require further development and refinement to enable compliance at future dates.

I ask for your continued cooperation and assistance as we further develop and implement the NIMS and the associated National Response Plan (NRP). I look forward to working with you as we continue our collective efforts to better secure the homeland and protect our citizens from both natural disasters and acts of terrorism.

INTRODUCTION AND OVERVIEW

A. INTRODUCTION

Since the September 11, 2001, attacks on the World Trade Center and the Pentagon, much has been done to improve prevention, preparedness, response, recovery, and mitigation capabilities and coordination processes across the country. A comprehensive national approach to incident management, applicable at all jurisdictional levels and across functional disciplines, would further improve the effectiveness of emergency response providers] and incident management organizations across a full spectrum of potential incidents and hazard scenarios. Such an approach would also improve coordination and cooperation between public and private entities in a variety of domestic incident management activities. For purposes of this document, incidents can include acts of terrorism, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, typhoons, war-related disasters, etc.

On February 28, 2003, the President issued Homeland Security Presidential Directive (HSPD)-5, which directs the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS). According to HSPD-5:

This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multi agency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.

While most incidents are generally handled on a daily basis by a single jurisdiction at the local level, there are important instances in which successful domestic incident management operations depend on the involvement of multiple jurisdictions, functional agencies, and emergency responder disciplines. These instances require effective and efficient coordination across this broad spectrum of organizations and activities. The NIMS uses a systems approach to integrate the best of existing processes and methods into a unified national framework for incident management. This framework forms the basis for interoperability and compatibility that will, in turn, enable a diverse set of public and private organizations to conduct well-integrated and effective incident management operations. It does this through a core set of concepts, principles, procedures, and organizational processes, terminology, and standards requirements applicable to a broad community of NIMS users.

B. CONCEPTS AND PRINCIPLES

To provide this framework for interoperability and compatibility, the NIMS is based on an appropriate balance of flexibility and standardization.

1. Flexibility.

The NIMS provides a consistent, flexible, and adjustable national framework within which government and private entities at all levels can work together to manage domestic incidents, regardless of their cause, size, location, or complexity. This flexibility applies across all phases of incident management: prevention, preparedness, response, recovery, and mitigation.

2. Standardization.

The NIMS provides a set of standardized organizational structures-such as the Incident Command System (ICS), multiagency coordination systems, and public information systems-as well as requirements for processes, procedures, and systems designed to improve interoperability among jurisdictions and disciplines in various areas, including: training; resource management; personnel qualification and certification; equipment certification; communications and information management; technology support; and continuous system improvement.

C. OVERVIEW

The NIMS integrates existing best practices into a consistent, nationwide approach to domestic incident management that is applicable at all jurisdictional levels and across functional disciplines in an all-hazards context. Six major components make up this systems approach. Each is addressed in a separate chapter of this document. Of these components, the concepts and practices for Command and Management (Chapter II) and Preparedness (Chapter III) are the most fully developed, reflecting their regular use by many jurisdictional levels and agencies responsible for incident management across the country. Chapters IV-VII, which cover Resource Management, Communications and Information Management, Supporting Technologies, and Ongoing Management and Maintenance, introduce many concepts and requirements that are also integral to the NIMS but that will require further collaborative development and refinement over time.

NIMS Components

The following discussion provides a synopsis of each major component of the NIMS, as well as how these components work together as a system to provide the national framework for preparing for, preventing, responding to, and recovering from domestic incidents, regardless of cause, size, or complexity. A more detailed discussion of each component is included in subsequent chapters of this document.

1. *Command and Management.*

NIMS standard incident command structures are based on three key organizational systems:

a. The ICS

The ICS defines the operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the life cycle of an incident;

b. Multiagency Coordination Systems.

These define the operating characteristics, interactive management components, and organizational structure of supporting incident management entities engaged at the Federal, State, local, tribal, and regional levels through mutual-aid agreements and other assistance arrangements; and

c. Public Information Systems.

These refer to processes, procedures, and systems for communicating timely and accurate information to the public during crisis or emergency situations.

2. *Preparedness*

Effective incident management begins with a host of preparedness activities conducted on a "steady-state" basis, well in advance of any potential incident. Preparedness involves an integrated combination of planning, training, exercises, personnel qualification and certification standards, equipment acquisition and certification standards, and publication management processes and activities.

a. Planning

Plans describe how personnel, equipment, and other resources are used to support incident management and emergency response activities. Plans provide mechanisms and systems for setting priorities, integrating multiple entities and functions, and ensuring that communications and other systems are available and integrated in support of a full spectrum of incident management requirements

b. Training

Training includes standard courses on multi agency incident command and management, organizational structure, and operational procedures; discipline-specific and agency-specific incident management courses; and courses on the integration and use of supporting technologies.

c. Exercises

Incident management organizations and personnel must participate in realistic exercises-including multidisciplinary, multi-jurisdictional, and multi sector interaction-to improve integration and interoperability and optimize resource utilization during incident operations.

d. Qualification and Certification

Qualification and certification activities are undertaken to identify and publish national-level standards and measure performance against these standards to ensure that incident management and emergency responder personnel are appropriately qualified and officially certified to perform NIMS-related functions.

e. Equipment Acquisition and Certification

Incident management organizations and emergency responders at all levels rely on various types of equipment to perform mission essential tasks. A critical component of operational preparedness is the acquisition of equipment that will perform to certain standards, including the capability to be interoperable with similar equipment used by other jurisdictions.

f. Publications Management

Publications management refers to forms and forms standardization, developing publication materials, administering publications-including establishing naming and numbering conventions, managing the publication and promulgation of documents, and exercising control over sensitive documents-and revising publications when necessary.

3. *Resource Management*

The NIMS defines standardized mechanisms and establishes requirements for processes to describe, inventory, mobilize, dispatch, track, and recover resources over the life cycle of an incident.

4. *Communications and Information Management*

The NIMS identifies the requirement for a standardized framework for communications, information management (collection, analysis, and dissemination), and information-sharing at all levels of incident management. These elements are briefly described as follows:

a. Incident Management Communications.

Incident management organizations must ensure that effective, interoperable communications processes, procedures, and systems exist to support a wide variety of incident management activities across agencies and jurisdictions.

b. Information Management.

Information management processes, procedures, and systems help ensure that information, including communications and data, flows efficiently through a commonly accepted architecture supporting numerous agencies and jurisdictions responsible for managing or directing domestic incidents, those impacted by the incident, and those contributing resources to the incident management effort. Effective information management enhances incident management and response and helps insure that crisis decision making is better informed.

5. *Supporting Technologies*

Technology and technological systems provide supporting capabilities essential to implementing and continuously refining the NIMS. These include voice and data communications systems, information management systems (i.e., record keeping and resource tracking), and data display systems. Also included are specialized technologies that facilitate ongoing operations and incident management activities in situations that call for unique technology-based capabilities.

6. *Ongoing Management and Maintenance*

This component establishes an activity to provide strategic direction for and oversight of the NIMS, supporting both routine review and the continuous refinement of the system and its components over the long term.

The appendices to this document provide additional system details regarding the IeS and resource typing.

1. As defined in the Homeland Security Act of 2002, Section 2(6), "The term 'emergency response providers' includes Federal, State, and local emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities." 6 U.S.C. 101(6)

2 As defined in the Homeland Security Act of 2002, the term "State" means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any possession of the United States. 6 U.S.C. 101 (14).

3 As defined in the Homeland Security Act of 2002, Section 2(10), the term "local government" means "(A) county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; an Indian tribe or authorized tribal organization, or in Alaska a Native village or Alaska Regional Native Corporation; and a rural community, unincorporated town or village, or other public entity." 6 U.S.C. 101 (10).

NATIONAL INCIDENT MANAGEMENT RESOURCE TYPING SYSTEM

A. PURPOSE

This appendix provides additional information regarding the national equipment typing system specified in Chapter IV of this document.

B. RESPONSIBILITIES

The NIMS Integration Center described in Chapter VII has the overall responsibility for ongoing development and refinement of various NIMS activities and programs. Under its auspices, the National Resource Management Working Group, chaired by the Emergency Preparedness and Response Directorate of the Department of Homeland Security, is responsible for establishing a national resource typing protocol. The NIMS resource typing protocol is based on inputs from representatives from various Federal agencies and departments and private organizations, as well as representatives of State and local emergency management; law enforcement; firefighting and emergency medical services; public health; public works; and other entities with assigned responsibilities under the Federal Response Plan and the National Response Plan. Federal, State, local, and tribal authorities should use the national typing protocol when inventorying and managing resources to promote common interoperability and integration.

C. ELEMENTS OF THE NATIONAL TYPING PROTOCOL

The resource typing protocol provided by the NIMS describes resources using category, kind, components, metrics, and type data. The following data definitions will be used:

1. Resource

For purposes of typing, *resources* consist of personnel, teams, facilities, supplies, and major items of equipment available for assignment to or use during incidents. Such resources may be used in tactical support or supervisory capacities at an incident site or EOC. Their descriptions include category, kind, components, metrics, and type.

2. Category

A *category* is the function for which a resource would be most useful. Table B-1 briefly describes the categories used in the national resource typing protocol.

3. Kind

Kind refers to broad classes that characterize like resources, such as teams, personnel, equipment, supplies, vehicles, and aircraft.

4. Components

Resources can comprise multiple *components*. For example, an engine company may be listed as having the eight components shown in Table B-2.

Table B-2-Example of a Resource with Multiple Components (Fire Fighting Engine Company)

As another example, urban search and rescue (US&R) teams consist of two 31person teams, four canines, and a comprehensive equipment cache. The cache is divided into five separate, color-coded elements and is stored in containers that meet specific requirements.

1.	Pump
2.	Hose 2 -"
3.	Hose 1 -"
4.	Hose 1"
5.	Water tank
6.	Ladder
7.	Master Stream
8.	Personnel

5. **Metrics**

Metrics are measurement standards. The metrics used will differ depending on the kind of resource being typed. The mission envisioned determines the specific metric selected. The metric must be useful in describing a resource's capability to support the mission. As an example, one metric for a disaster medical assistance team is the number of patients it can care for per day. Likewise, an appropriate metric for a hose might be the number of gallons of water per hour that can flow through it. Metrics should identify capability and/or capacity.

6. **Type**

Type refers to the level of resource capability. Assigning the Type I label to a resource implies that it has a greater level of capability than a Type II of the same resource (for example, due to its power, size, or capacity), and so on to Type IV. Typing provides managers with additional information to aid the selection and best use of resources. In some cases, a resource may have less than or more than four types; in such cases, either additional types will be identified, or the type will be described as "not applicable." The type assigned to a resource or a component is based on a minimum level of capability described by the identified metric(s) for that resource. For example, the U.S. Coast Guard has typed oil skimmers based on barrels per day, as outlined below in Table B-3:

Table B-3-Example of a Resource with MultipleTypes (Coast Guard Oil Skimmer)

Type I	9,600 bbls/day
Type II	2,880 bbls/day
Type III	480 bbls/day
Type IV	N/A

7. **Additional Information**

The national resource typing protocol will also provide the capability to use additional information that is pertinent to resource decision-making. For example, if a particular set of resources can only be released to support an incident under particular authorities or laws, the protocol should provide the ability for resource managers to understand such limitations.

While not all key terms in this glossary are covered in these guidelines they may be used during an incident.

GLOSSARY OF KEY TERMS

For the purposes of the NIMS, the following terms and definitions apply:

Agency: A division of government with a specific function offering a particular kind of assistance. In ICS, agencies are defined either as jurisdictional (having statutory responsibility for incident management) or as assisting or cooperating (providing resources or other assistance).

Agency Representative: A person assigned by a primary, assisting, or cooperating Federal, State, local, or tribal government agency or private entity that has been delegated authority to make decisions affecting that agency's or organization's participation in incident management activities following appropriate consultation with the leadership of that agency.

Area Command (Unified Area Command): An organization established (1) to oversee the management of multiple incidents that are each being handled by an ICS organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multi-jurisdictional. Area Command may be established at an emergency operations center facility or at some location other than an incident command post.

Assessment: The evaluation and interpretation of measurements and other information to provide a basis for decision-making.

Assignments: Tasks given to resources to perform within a given operational period that are based on operational objectives defined in the IAP.

Assistant: Title for subordinates of principal Command Staff positions. The title indicates a level of technical capability, qualifications, and responsibility subordinate to the primary positions. Assistants may also be assigned to unit leaders.

Assisting Agency: An agency or organization providing personnel, services, or other resources to the agency with direct responsibility for incident management. See also Supporting Agency.

Available Resources: Resources assigned to an incident, checked in, and available for a mission assignment, normally located in a Staging Area.

Branch: The organizational level having functional or geographical responsibility for major aspects of incident operations. A branch is organizationally situated between the section and the division or group in the Operations Section, and between the section and units in the Logistics Section. Branches are identified by the use of Roman numerals or by functional area.

Chain of Command: A series of command, control, executive, or management positions in hierarchical order of authority.

Check-In: The process through which resources first report to an incident. Check-in locations include the incident command post, Resources Unit, incident base, camps, staging areas, or directly on the site.

Chief: The ICS title for individuals responsible for management of functional sections: Operations, Planning, Logistics, Finance/Administration, and Intelligence (if established as a separate section).

Command: The act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority.

Command Staff: In an incident management organization, the Command Staff consists of the Incident Commander and the special staff positions of Public Information Officer, Safety Officer, Liaison Officer, and other positions as required, who report directly to the Incident Commander. They may have an assistant or assistants, as needed.

Common Operating Picture: A broad view of the overall situation as reflected by situation reports, aerial photography, and other information or intelligence.

Communications Unit: An organizational unit in the Logistics Section responsible for providing communication services at an incident or an EOC. A Communications Unit may also be a facility (e.g., a trailer or mobile van) used to support an Incident Communications Center.

Cooperating Agency: An agency supplying assistance other than direct operational or support functions or resources to the incident management effort.

Coordinate: To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.

Deputy: A fully qualified individual who, in the absence of a superior, can be delegated the authority to manage a functional operation or perform a specific task. In some cases, a deputy can act as relief for a superior and, therefore, must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.

Dispatch: The ordered movement of a resource or resources to an assigned operational mission or an administrative move from one location to another.

Division: The partition of an incident into geographical areas of operation. Divisions are established when the number of resources exceeds the manageable span of control of the Operations Chief. A division is located within the ICS organization between the branch and resources in the Operations Section.

Emergency: Absent a Presidentially declared emergency, any incident(s), human-caused or natural, that requires responsive action to protect life or property. Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, an emergency means any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.

Emergency Operations Centers (EOCs): The physical location at which the coordination of information and resources to support domestic incident management activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOCs may be organized by major functional disciplines (e.g., fire, law enforcement, and medical services), by jurisdiction (e.g., Federal, State, regional, county, city, tribal), or some combination thereof.

Emergency Operations Plan: The "steady-state" plan maintained by various jurisdictional levels for responding to a wide variety of potential hazards.

Emergency Public Information: Information that is disseminated primarily in anticipation of an emergency or during an emergency. In addition to providing situational information to the public, it also frequently provides directive actions required to be taken by the general public.

Emergency Response Provider: Includes Federal, State, local, and tribal emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities. See Section 2 (6), Homeland Security Act of 2002, Pub. L. 107-296, 116 Stat. 2135 (2002). Also known as *Emergency Responder*.

Evacuation: Organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

Event: A planned, nonemergency activity. ICS can be used as the management system for a wide range of events, e.g., parades, concerts, or sporting events.

Federal: Of or pertaining to the Federal Government of the United States of America.

Function: Function refers to the five major activities in ICS: Command, Operations, Planning, Logistics, and Finance/Administration. The term function is also used when describing the activity involved, e.g., the planning function. A sixth function, Intelligence, may be established, if required, to meet incident management needs.

General Staff: A group of incident management personnel organized according to function and reporting to the Incident Commander. The General Staff normally consists of the Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief.

Group: Established to divide the incident management structure into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. Groups, when activated, are located between branches and resources in the Operations Section. (See *Division*.)

Hazard: Something that is potentially dangerous or harmful, often the root cause of an unwanted outcome.

Incident: An occurrence or event, natural or human-caused, that requires an emergency response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, wild land and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

Incident Action Plan: An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.

Incident Command Post (ICP): The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be collocated with the incident base or other incident facilities and is normally identified by a green rotating or flashing light.

Incident Command System (ICS): A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.

Incident Commander (IC): The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

Incident Management Team (IMT): The IC and appropriate Command and General Staff personnel assigned to an incident.

Incident Objectives: Statements of guidance and direction necessary for selecting appropriate strategy(s) and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow strategic and tactical alternatives.

Initial Action: The actions taken by those responders first to arrive at an incident site.

Initial Response: Resources initially committed to an incident.

Intelligence Officer: The intelligence officer is responsible for managing internal information, intelligence, and operational security requirements supporting incident management activities. These may include information security and operational security activities, as well as the complex task of ensuring that sensitive information of all types (e.g., classified information, law enforcement sensitive information, proprietary information, or export-controlled information) is handled in a way that not only safeguards the information, but also ensures that it gets to those who need access to it to perform their missions effectively and safely.

Joint Information Center (JIC): A facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating agencies should collocate at the nc.

Joint Information System (JIS): Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during crisis or incident operations. The mission of the JIS is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies on behalf of the IC; advising the IC concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Jurisdiction: A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, State, or Federal boundary lines) or functional (e.g., law enforcement, public health).

Liaison: A form of communication for establishing and maintaining mutual understanding and cooperation.

Liaison Officer: A member of the Command Staff responsible for coordinating with representatives from cooperating and assisting agencies.

Local Government: A county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; an Indian tribe or authorized tribal organization, or in Alaska a Native village or Alaska Regional Native Corporation; a rural community, unincorporated town or village, or other public entity. See Section 2 (10), Homeland Security Act of 2002, Pub. L. 107-296, 116 Stat. 2135 (2002).

Logistics: Providing resources and other services to support incident management.

Logistics Section: The section responsible for providing facilities, services, and material support for the incident.

Major Disaster: As defined under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5122), a major disaster is:

any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought),

or,

regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, tribes, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

Management by Objective: A management approach that involves a four-step process for achieving the incident goal. The Management by Objectives approach includes the following: establishing overarching objectives; developing and issuing assignments, plans, procedures, and protocols; establishing specific, measurable objectives for various incident management functional activities and directing efforts to fulfill them, in support of defined strategic objectives; and documenting results to measure performance and facilitate corrective action.

Mitigation: The activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident. Mitigation measures may be implemented prior to, during, or after an incident. Mitigation measures are often informed by lessons learned from prior incidents. Mitigation involves ongoing actions to reduce exposure to, probability of, or potential loss from hazards. Measures may include zoning and building codes, floodplain buyouts, and analysis of hazard-related data to determine where it is safe to build or locate temporary facilities. Mitigation can include efforts to educate governments, businesses, and the public on measures they can take to reduce loss and injury.

Mobilization: The process and procedures used by all organizations-Federal, State, local, and tribal-for activating, assembling, and transporting all resources that have been requested to respond to or support an incident.

Multi-agency Coordination Entity: A multi agency coordination entity functions within a broader multi agency coordination system. It may establish the priorities among incidents and associated resource allocations, deconflict agency policies, and provide strategic guidance and direction to support incident management activities.

Multi-agency Coordination Systems: Multi-agency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The components of multi agency coordination systems include facilities, equipment,

emergency operation centers (EOCs), specific multi agency coordination entities, personnel, procedures, and communications. These systems assist agencies and organizations to fully integrate the subsystems of the NIMS.

Multi-jurisdictional Incident: An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of an incident. In ICS, these incidents will be managed under Unified Command.

Mutual-Aid Agreement: Written agreement between agencies and/or jurisdictions that they will assist one another on request, by furnishing personnel, equipment, and/or expertise in a specified manner.

National: Of a nationwide character, including the Federal, State, local, and tribal aspects of governance and polity.

National Disaster Medical System: A cooperative, asset-sharing partnership between the Department of Health and Human Services, the Department of Veterans Affairs, the Department of Homeland Security, and the Department of Defense. NDMS provides resources for meeting the continuity of care and mental health services requirements of the Emergency Support Function 8 in the Federal Response Plan.

National Incident Management System: A system mandated by HSPD-5 that provides a consistent nationwide approach for Federal, State, local, and tribal governments; the private-sector, and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, local, and tribal capabilities, the NIMS includes a core set of concepts, principles, and terminology. HSPD-5 identifies these as the ICS; multi agency coordination systems; training; identification and management of resources (including systems for classifying types of resources); qualification and certification; and the collection, tracking, and reporting of incident information and incident resources.

National Response Plan: A plan mandated by HSPD-5 that integrates Federal domestic prevention, preparedness, response, and recovery plans into one all-discipline, all-hazards plan.

Nongovernmental Organization: An entity with an association that is based on interests of its members, individuals, or institutions and that is not created by a government, but may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples of NGOs include faith-based charity organizations and the American Red Cross.

Operational Period: The time scheduled for executing a given set of operation actions, as specified in the Incident Action Plan. Operational periods can be of various lengths, although usually not over 24 hours.

Operations Section: The section responsible for all tactical incident operations. In ICS, it normally includes subordinate branches, divisions, and/or groups.

Personnel Accountability: The ability to account for the location and welfare of incident personnel. It is accomplished when supervisors ensure that ICS principles and processes are functional and that personnel are working within established incident management guidelines.

Planning Meeting: A meeting held as needed prior to and throughout the duration of an incident to select specific strategies and tactics for incident control operations and for service and support planning. For larger incidents, the planning meeting is a major element in the development of the Incident Action Plan (IAP).

Planning Section: Responsible for the collection, evaluation, and dissemination of operational information related to the incident, and for the preparation and documentation of the IAP. This section also maintains information on the current and forecasted situation and on the status of resources assigned to the incident.

Preparedness: The range of deliberate, critical tasks and activities necessary to build, sustain, and improve the operational capability to prevent, protect against, respond to, and recover from domestic incidents. Preparedness is a continuous process. Preparedness involves efforts at all levels of government and between government and private-sector and nongovernmental organizations to identify threats, determine vulnerabilities, and identify required resources. Within the NIMS, preparedness is operationally focused on establishing guidelines, protocols, and standards for planning, training and exercises, personnel qualification and certification, equipment certification, and publication management.

Preparedness Organizations: The groups and fora that provide interagency coordination for domestic incident management activities in a nonemergency context. Preparedness organizations can include all agencies with a role in incident management, for prevention, preparedness, response, or recovery activities. They represent a wide variety of committees, planning groups, and other organizations that meet and coordinate to ensure the proper level of planning, training, equipping, and other preparedness requirements within a jurisdiction or area.

Prevention: Actions to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions to protect lives and property. It involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, preempting, interdicting, or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice.

Private Sector: Organizations and entities that are not part of any governmental structure. It includes for-profit and not-for-profit organizations, formal and informal structures, commerce and industry, and private voluntary organizations (PYO).

Processes: Systems of operations that incorporate standardized procedures, methodologies, and functions necessary to provide resources effectively and efficiently. These include resource typing, resource ordering and tracking, and coordination.

Public Information Officer: A member of the Command Staff responsible for interfacing with the public and media or with other agencies with incident-related information requirements.

Publications Management: The publications management subsystem includes materials development, publication control, publication supply, and distribution. The development and distribution of NIMS materials is managed through this subsystem. Consistent documentation is critical to success, because it ensures that all responders are familiar with the documentation used in a particular incident regardless of the location or the responding agencies involved.

Qualification and Certification: This subsystem provides recommended qualification and certification standards for emergency responder and incident management personnel. It also allows the development of minimum standards for resources expected to have an interstate application. Standards typically include training, currency, experience, and physical and medical fitness.

Reception Area: This refers to a location separate from staging areas, where resources report in for processing and out-processing. Reception Areas provide accountability, security, situational awareness briefings, safety awareness, distribution of IAPs, supplies and equipment, feeding, and bed down.

Recovery: The development, coordination, and execution of service and site-restoration plans; the reconstitution of government operations and services; individual, private-sector, nongovernmental, and public-assistance programs to provide housing and to promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental, and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents.

Recovery Plan: A plan developed by a State, local, or tribal jurisdiction with assistance from responding Federal agencies to restore the affected area.

Resources: Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations and for which status is maintained. Resources are described by kind and type and may be used in operational support or supervisory capacities at an incident or at an EOC.

Resource Management: Efficient incident management requires a system for identifying available resources at all jurisdictional levels to enable timely and unimpeded access to resources needed to prepare for, respond to, or recover from an incident. Resource management under the NIMS includes mutual-aid agreements; the use of special Federal, State, local, and tribal teams; and resource mobilization protocols.

Resources Unit: Functional unit within the Planning Section responsible for recording the status of resources committed to the incident. This unit also evaluates resources currently committed to the incident, the effects additional responding resources will have on the incident, and anticipated resource needs.

Response: Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice.

Safety Officer: A member of the Command Staff responsible for monitoring and assessing safety hazards or unsafe situations and for developing measures for ensuring personnel safety.

Section: The organizational level having responsibility for a major functional area of incident management, e.g., Operations, Planning, Logistics, Finance/Administration, and Intelligence (if established). The section is organizationally situated between the branch and the Incident Command.

Span of Control: The number of individuals a supervisor is responsible for, usually expressed as the ratio of supervisors to individuals. (Under the NIMS, an appropriate span of control is between 1:3 and 1 :7.)

Staging Area: Location established where resources can be placed while awaiting a tactical assignment. The Operations Section manages Staging Areas.

State: When capitalized, refers to any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any possession of the United States. See Section 2 (14), Homeland Security Act of 2002, Pub. L. 107-296, 116 Stat. 2135 (2002).

Strategic: Strategic elements of incident management are characterized by continuous long-term, high-level planning by organizations headed by elected or other senior officials. These elements involve the adoption of long-range goals and objectives, the setting of priorities; the establishment of budgets and other fiscal decisions, policy development, and the application of measures of performance or effectiveness.

Strike Team: A set number of resources of the same kind and type that have an established minimum number of personnel.

Strategy: The general direction selected to accomplish incident objectives set by the Ie.

Supporting Technologies: Any technology that may be used to support the NIMS is included in this subsystem. These technologies include orthophoto mapping, remote automatic weather stations, infrared technology, and communications, among various others.

Task Force: Any combination of resources assembled to support a specific mission or operational need. All resource elements within a Task Force must have common communications and a designated leader.

Technical Assistance: Support provided to State, local, and tribal jurisdictions when they have the resources but lack the complete knowledge and skills needed to perform a required activity (such as mobile-home park design and hazardous material assessments).

Terrorism: Under the Homeland Security Act of 2002, terrorism is defined as activity that involves an act dangerous to human life or potentially destructive of critical infrastructure or key resources and is a violation of the criminal laws of the United States or of any State or other subdivision of the United States in which it occurs and is intended to intimidate or coerce the civilian population or influence a government or affect the conduct of a government by mass destruction, assassination, or kidnapping. See Section 2 (IS), Homeland Security Act of 2002, Pub. L. 107-296, 116 Stat. 2135 (2002).

Threat: An indication of possible violence, harm, or danger.

Tools: Those instruments and capabilities that allow for the professional performance of tasks, such as information systems, agreements, doctrine, capabilities, and legislative authorities.

Tribal: Any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native Village as defined in or established pursuant to the Alaskan Native Claims Settlement Act (85 stat. 688) [43 U.S.C.A. and 1601 et seq.], that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Type: A classification of resources in the ICS that refers to capability. Type I is generally considered to be more capable than Types 2, 3, or 4, respectively, because of size; power; capacity; or, in the case of incident management teams, experience and qualifications.

Unified Area Command: A Unified Area Command is established when incidents under an Area Command are multi-jurisdictional. (See *Area Command*.)

Unified Command: An application of ICS used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the UC, often the senior person from agencies and/or disciplines participating in the UC, to establish a common set of objectives and strategies and a single IAP.

Unit: The organizational element having functional responsibility for a specific incident planning, logistics, or finance/administration activity.

Unity of Command: The concept by which each person within an organization reports to one and only one designated person. The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective.

Volunteer: For purposes of the NIMS, a volunteer is any individual accepted to perform services by the lead agency, which has authority to accept volunteer services, when the individual performs services without promise, expectation, or receipt of compensation for services performed. See, e.g., 16 U.S.c. 742f(c) and 29 CFR 553.101.

**COUNTY OF CHESTER
DEPARTMENT OF EMERGENCY SERVICES**

Field Services Division

Mass Casualty Units – 911 Field Providers

DES Policy #400-3

1 April 2000

Purpose: To bring awareness and knowledge to the field providers on the methods used for both requesting and utilizing the Mass Casualty Units.

Background: There are two Mass Casualty Units strategically located within Chester County. One unit is located at the Kimberton Fire Company (Station 61), with the second being located at the Cochranville Fire Company (Station 27). Both units are similar in equipment composition.

The Mass Casualty Unit located at Kimberton Fire Company has the radio designation of “Mass Casualty 61,” while the unit located at the Cochranville Fire Company has the radio designation of “Mass Casualty 27.” Housing stations are required to provide tow for these units when called for.

Coordination and equipment maintenance / restocking for these units lies specifically within the Field Services Division of the Chester County Department of Emergency Services.

The Mass Casualty Units are specifically designed as an equipment bank to be integrated within EMS operations at a disaster scene.

Procedure:

After Incident Command has been established, proper triage has been performed, and a total number of victims is known or estimated, a simple formula can be utilized as for the need for the Mass Casualty Units.

- 1.1. For incidents with less than 15 patients, there probably is not a need for a Mass Casualty Unit to be dispatched.
- 1.2. Incidents presenting with 15-30 patients will require the use of at least one Mass Casualty Unit. Incidents of greater than 30 patients will require the use of both Mass Casualty Units.

Once a determination of the number of patients is known at the scene of a mass casualty incident, the radio room will be notified as to this number. If Mass Casualty Unit requests have not been made, the radio room will then act on the following set guidelines.

- 2.1 Less than 15 patients: No automatic dispatch.
- 2.2 Between 15 and 30 patients: One County Mass Casualty Unit will be automatically dispatched.
- 2.3 Greater than 30 patients: Both County Mass Casualty Units will be automatically dispatched.
- 2.4 While the radio room will have the above set guidelines, the Incident Commander on scene will have final say concerning the number, if any, of Mass Casualty Units, and may recall or request any number of Mass Casualty Units.

If Incident Command requests a “Medical Box” assignment to be dispatched, the radio room will then act on the following set guidelines.

3.1 Level One Medical Box: The dispatcher will ascertain if the deployment of a Mass Casualty Unit is necessary.

3.2 Level Two Medical Box: The dispatcher will automatically dispatch one Mass Casualty Unit.

The “Disaster Box” assignment automatically calls for the dispatch of one Mass Casualty Unit.

If the need is for one Mass Casualty Unit, the Radio Room will make the determination of which unit is closest, and will dispatch the appropriate unit. It is not the field provider’s responsibility to determine which unit they want.

Chester County Radio Communications will dispatch the appropriate unit housing company and advise them in dispatch that the need for the Mass Casualty Unit exists.

The appropriate unit housing company will set the unit up for tow, and place themselves responding with the Radio Room.

7.1 i.e. “Radio...Tac 61, Mass Casualty 61 responding...” or

7.2 “Radio...Squad 12, Mass Casualty 12 responding...”

Units towing the units will keep status with the Radio Room for the entire incident.

Upon approach, the units towing the units will contact Incident Command for staging orders, and then after parking and unlocking the unit, shall advise Incident Command that the unit is available for use.

Although patient care will always come first, it is requested that someone (preferably the driver or a crewmember of the unit towing vehicle) remain with the unit for inventory control.

Inventory will be done on prescribed forms located in the side doors of each Mass Casualty Unit. All equipment, both disposable and non-disposable will be accounted for, after completion of the incident. Any non-disposable equipment will be tracked, so as to have a destination hospital known where these items may be later reacquired.

Upon returning the Mass Casualty Unit(s) to its/their respectable station(s), notify Chester County Radio Room to have the BLS Coordinator paged, so that the process of restocking the unit may commence. The unit housing company can make a decision to place the unit(s) “out of service” if an excessive amount of equipment has been used off the unit(s).

The BLS Coordinator will assume full responsibility of making sure the units are restocked completely, and once again ready for service.

The units will not respond on non-emergency calls such as special events.

Edward J. Atkins
Director

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U.S. Department of Homeland Security

Federal Emergency Management Agency

SMART Triage Method

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