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**The Triage Process
(Reprint)**

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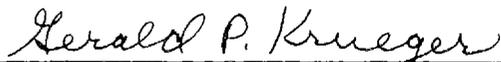
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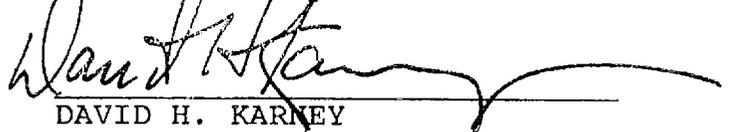


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19. ABSTRACT (Continue on reverse if necessary and identify by block number) Triage is a basic medical skill which is most commonly applied in mass disaster or combat situations to sort casualties. The number of patients and the care required exceeds the medical resources available, and the care rendered must be given on a rational and prioritized basis. Most previously published systems for dealing with large numbers of patients have classification schemes based on medical diagnoses. This approach is difficult for paramedical providers (such as paramedics, emergency medical technicians, or combat medics) to implement without additional medical training and experience. This paper presents a simple initial patient classification scheme based only on recognition of shock symptoms. The BASIC mnemonic is described for delivery of initial care at a disaster field site. The scheme is suitable for implementation without physicians present until a hospital facility is reached. The differences between triage classification schemes required at various points in the rescue process are also discussed. The paper is one of a series of articles on disaster medical management originally published in the January 1986 edition of <u>Topics in Emergency Medicine</u> by Aspen Systems Corporation.					
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The triage process

Instructions to Enrollees

The closed book, multiple-choice examination that follows this article is designed to test your understanding of the content according to the educational objectives listed below.

For CE enrollment information, see the announcement on page v.

Educational Objectives

Based on the content of the article, the enrollee should be able to:

1. Define levels of mass casualty incidents and apply the triage process.
2. Describe critical intervention steps during initial care of disaster victims.
3. Compare and contrast field and hospital triage operations.
4. Explain principal roles for disaster management in the prehospital and hospital phases.

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TRIAGE IS THE process of selecting or sorting victims by severity of condition or priority of treatment needed and available transportation. This activity is fluid in its application and has as a fundamental principle the reassessment of victim condition at various times. The determination of invasive treatment to be given and transport priority to a more definitive care site is usually made by the most appropriately skilled medical personnel present.

The triage process is similar wherever it is done and ranges from the simple categorization of severity of illness or injury to the determination of the order of application of definitive treatment. Many articles and books have addressed triage,¹⁻⁴ but most have taken a rather sophisticated medical approach, ie, triage by diagnosis or probable outcome. The average field medical worker does not have the sophistication of training or the diagnostic tools to make such determinations. Even more importantly, the situation is often chaotic, with darkness, noise, and even the possibility of further damage present. A triage system must be simple and clear in order to work in the

widest variety of circumstances. Personnel must be thoroughly familiar with the tasks and procedures in order to avoid the effects of disorientation and panic that may arise during an emotionally overwhelming and physically exhausting event.

In order to discuss the process clearly, a basic set of definitions is necessary. Much confusion has existed in discussions among members of different emergency medical services (EMS) systems because of the inconsistency of the terms used to describe similar functions. Most of the following definitions have been derived from attempts by the American College of Emergency Physicians^{3,6} to establish a uniform set of such definitions.

DEFINITIONS

1. *Disaster* may be characterized as any community emergency that disrupts normal community function and causes concern for the safety of the citizens, including their lives and property. Disasters that result in injuries are also referred to as "mass casualty incidents."
2. *Level 1 mass casualty incident (MCI)* is a localized multiple-casualty emergency wherein local medical resources are available and adequate to provide for field medical treatment and stabilization, including triage.
3. *Level 2 MCI* is a multiple-casualty emergency wherein the large number of casualties or lack of local medical care facilities are such that they require multi-jurisdiction (regional) medical mutual aid.
4. *Level 3 MCI* is a mass casualty emergency wherein the capabilities of local and regional medical resources are exceeded or overwhelmed. Deficiencies in medical supplies and personnel are such that they require assistance from state or federal agencies.
5. *Primary triage* is the first sorting of victims at the location of the incident and in the positions found. This phase of triage determines the order of evacuation from the field and includes medical treatments designed only to stabilize victims in order to minimize further loss of life and limb.
6. *Secondary triage* is the second phase of sorting victims, usually performed during evacuation from the positions of injury to on-scene treatment and staging areas. This phase matches available treatment resources on-scene to the numbers of victims and types of medical problems.
7. *Transport triage* is the third phase of victim sorting, when partially stabilized victims are evacuated from the site of the incident to hospitals that have been selected to receive them on the basis of in-house bed and physician availability.
8. *The medical control officer (MCO)*, also called the Chief EMS Officer, is the medical resource person in overall charge of all disaster field medical operations including patient care, triage, and all medical and health personnel.
9. *The medical triage master* is the individual in charge, under the direction of the MCO, of sorting of patients to establish the priorities of treatment and care of victims awaiting transportation.
10. *The medical transportation officer*, also called the loading officer or staging officer, is the individual in charge, under the direction of the MCO, of all ambulances and other victim transport vehicles, including assignment of victims to various receiving hospitals as accomplished through radio communications or protocol.
11. *Basic life support* is a set of noninvasive medical skills including cardiopulmonary resuscitation, hemorrhage control,

splinting, bandaging, immobilization, and extrication. In many jurisdictions, it also includes application of pneumatic antishock garments.

12. *Advanced life support* includes basic life support skills plus intravenous therapy, parenteral drug administration, cardiac monitoring, cardiac defibrillation and cardioversion, endotracheal, esophageal obturator airway, and esophageal gastric tube airway intubation, and any additional skills that are locally defined.

OVERALL PHILOSOPHY

The simplest overall philosophy for medical disaster management is the provision of the best possible medical care to the greatest number of victims. This means giving care to some while letting others wait. Ideally those needing intervention for lethal conditions that are quickly and easily reversible will get care first. Care is delayed for those whose conditions are judged to be able to tolerate waiting, but some individuals who were perhaps salvageable in optimal circumstances will die during a disaster.

In those everyday optimal circumstances, each victim gets the full benefit of technology, manpower, and time. Even in a level 1 MCI, there is usually enough equipment, personnel, and time to do the utmost for each victim. In level 2 and 3 MCIs, however, the resources may be outrun, work force is relatively scarce, and time is never enough to allow the heroics people have come to expect from prehospital and hospital emergency department care. The usual process of thorough efforts at diagnosis and treatment are suspended in favor of multiple phases of care designed to sequentially eliminate life-threatening conditions and establish priorities for definitive treatment among the victims. Most emergency physicians will recognize the busy community hos-

pital with a superimposed multivictim, severe motor vehicle accident as the scene of a level 2 MCI.

CLASSIFICATION OF SEVERITY

Identification of condition

Before systems of care delivery are discussed, it will be helpful to explore the role of classification systems for severity of injuries. As previously mentioned, many approaches are based on anatomical or physiological diagnoses. These systems are suitable for later levels of triage, such as—determination of sequence to the operating suite, but are seldom useful to prehospital or even emergency department personnel.

The central problem is the limitation of resources. Each victim optimally has a potential need for an appropriate specialist with complete hospital facilities. The first person to reach the victim, however, is likely to be an emergency medical technician-ambulance (EMT-A) or emergency medical technician-paramedic (EMT-P) at best. The equipment carried by these personnel usually consists of little more than bandages and a few oropharyngeal airways. In level 2 and 3 MCIs, there will usually be a later stage of additional stabilization on scene, usually administered by those EMT-Ps present. The victim may receive available intravenous fluids, splints, pneumatic antishock garments (in very limited supply), and blankets. After transportation, the victim will be received in a crowded emergency department with multiple physicians, nurses, and others dividing their time among the victims in order to get them started on the definitive care they require. Later, victims will be transferred to the operating suites, intensive care units, and hospital beds they will need for recovery.

Throughout this process, there is a need to clearly decide and then mark the priority that

Outcome Probability Triage Criteria

Highest priority (must be treated first at the scene and transported immediately):

- Airway and breathing difficulties
- Cardiac arrest
- Uncontrolled or suspected severe hidden bleeding
- Open chest or abdominal wounds
- Severe head injuries with evidence of brain damage, however slight
- Several medical problems: poisonings, diabetes with complications, cardiac disease with failure

Second priority (transportation and hospital treatment can be delayed):

- Burns without complications
- Major or multiple fractures
- Back injuries with or without spinal cord damage

Lowest priority (to be transported or treated last):

- Minor fractures or other injuries of a minor nature
- Obviously mortal wounds where death appears reasonably certain
- Obviously dead

the individual victim has in getting through this maze of medical care. Schemes with from three to five possible levels of priority have been devised. An illustrative example from the American Academy of Orthopaedic Surgeons textbook is shown in the boxed material, "Outcome Probability Triage Criteria." The most popular system to date comprises four levels but has variations on the criteria for assignment to each level. Most controversy centers on the assignment of victims with mortal wounds and those who appear to have suffered recent cardiac arrest. These issues will be addressed below in more detail. The scheme developed (see boxed material, "Primary Field

Triage Criteria") has been in use in New England for prehospital care during the past several years and can be adjusted to the sophistication of the individual using it.

An EMT-A should be able to differentiate between the states of shock and no shock under a wide variety of circumstances. An individual with this level of training can also recognize truly dead victims (decomposed, dismembered, burned beyond recognition) and most less-than-serious injuries (especially if the victim can walk). This level of triage is therefore the one used by the first caregivers. No other diagnosis is required to determine the order of evacuation from the injury site to the treatment areas.

The increased level of knowledge of the EMT-P is used to refine judgments about condition severity, but these are refinements in the recognition of shock states and their antecedents. Thus the paramedic can also use the system of triage described above. Knowledge of the body system that is most probably injured is helpful for assignment of victim transportation to appropriate hospitals, but a true diagnosis is unnecessary. Only in the emergency department is it necessary to make

Primary Field Triage Criteria

Priority 3 (urgent treatment with early transport to hospital):

- Shock with or without detectable vital signs

Priority 2 (treatment required as soon as available):

- No shock, but injury needs sophisticated care

Priority 1 (treatment can be delayed):

- Could ride to the hospital on an evacuation bus

Priority 0 (no treatment; leave in place):

- Obviously dead

judgments based on diagnostic sophistication, and then usually after the shock state has been treated with necessary measures.

Triage tags

After a simple triage classification has been established, a method of marking victims with their current priorities is needed. Several systems are available on the commercial market. They vary in the methods used for tag color-coding of severity, in visibility, in strength of materials, and in bulk for carrying on the field. There appears to be no perfect system, and each should be evaluated for its applicability to local needs. A discussion of commercial tag systems, with a critique of each, is available in the article by Cohen.⁷ The tag in use in New England is the METTAG from the *Journal of Civil Defense*, Starke, Fla. Its optimal use is not universally agreed upon, but one protocol is given here: the tag bottom is ripped off to expose the color bar corresponding to the severity of injuries. One dog-ear is removed by the initial triage person and saved to account for classifications later and to obtain a body count of those triaged. The tag is then attached to the right ankle of victims who are not ambulatory (which keeps the tag visible to others even if the victim rolls over). Ambulatory victims are tagged on the right wrist. The victims are evacuated from the field according to their color codes.

Upon removal from the field to the treatment site, the victim is assigned to a treatment area by a medical triage master, who tears off the remaining dog-ear to provide a count of those removed from the field for treatment. The treatment area to which the victim is assigned now corresponds to the present condition, not the tag color. The tag then becomes a paper record for notation of treatments given and location of injuries. It becomes secondary to the hospital record in the emergency department, but it should be attached to that record for later review.

Criticism of the METTAG most often cites its method of indicating severity by tear-off tabs, thus allowing less-serious patients to "upgrade" themselves by tearing off additional tabs. In practice, this is not likely to be common behavior, but more significantly, the only gain would be removal from the field sooner. The tag determines only that sequence, not treatment at the staging area or transport priority. Other criticisms are that, because of its size, the tag does not show the color of the severity code clearly enough and that the tag has not been fully waterproofed and disintegrates when wet.

ROLES OF PARTICIPANTS

At this point, a delineation of the potential roles of the prehospital and hospital personnel will identify the variety of responsibilities for disaster medical management.

Prehospital roles

Rescuer/primary triage—These individuals, usually less senior EMT-As, proceed into the sector of the field site assigned by the medical triage master with light bandages and wrap-around dressings, as many oropharyngeal airways as are available, and packets of disaster tags. They locate victims, provide minimal stabilization, and classify the severity of injuries.

Litter bearer—These individuals are often firefighters and others who have been secured from initial duties or are not needed for other tasks. They proceed onto the field with whatever equipment is available for victim transportation and search their assigned sector for victims with the highest priority. These victims are then loaded and carried to the secondary triage point, which is located at the entrance to the treatment area (and should be clearly marked). Of course, when the situation demands rapid removal of victims due to imminent danger, evacuation without triage

may come first, resulting in a secure assembly area from which victims will be triaged and reshifted to treatment areas.

Medical triage master (MTM)—This senior EMT is in charge of triage and assigns others to primary triage or to treatment areas as appropriate. This EMT takes up a position at the entrance to the treatment area in order to reassess the victims being evacuated from the field and to triage them to the appropriate treatment areas in the staging area.

Treatment EMTs—These individuals are senior EMTs who are assigned to various treatment areas. They provide stabilizing interventions as appropriate to evacuated victims and continually reassess their conditions, shifting patients among the areas as necessary when conditions change.

Medical transport triage officer—This senior EMT with communications system skills assigns incoming ambulances to parking areas, initiates the hospital network assessment of available beds and medical staff specialists, collects victim census information, and assigns patients to receiving hospitals (most often in consultation with medical control).

Transporters—These individuals are assigned to drive vehicles and accompany victims during transport to the receiving hospitals. Drivers do not need medical training, but they do need to know vehicle handling and the routes to the receiving hospitals. It is desirable that the person accompanying victims in the back of the vehicle be at least as sophisticated as the treatments being administered to the victims carried if the transport time is long. Otherwise, EMT-As are a rational choice.

Hospital roles

Entry triage officer—This person is stationed at the entry (usually the emergency department) door and reassesses victims as they enter the hospital. The victims are tagged as they are triaged to various areas in the hospital that have been set up to receive them. This role has

traditionally been filled by a surgeon, but the diversity of conditions seen in a disaster and the acute need for surgeons has made this a role for a senior emergency physician in most situations.

Medical records—This person records each victim at the entry door on arrival and starts a new record, which may be an abbreviated disaster record or a hospital chart. The census is continually kept and periodically forwarded to the hospital control point for distribution to public affairs personnel.

Physician-in-charge—This physician is in charge of medical operations in the disaster treatment areas of the hospital. The position may be determined by the nature of the disaster or by set protocol, but it should not be the same physician who is responsible for triage of victims.

Administrator-in-charge—This person is in charge of the ancillary personnel of the hospital who are vital to the medical effort. There is a continual need for liaison to housekeeping and central services staffs, as well as a requirement for a focal point of information flow from the area to the outside world.

Treatment team—These individuals should be tailored to the nature of the conditions generated by the disaster. Medical disasters do not need excess surgeons, and internists do not usually insert chest tubes. The call-in plan must be flexible. The team members take direction from the physician-in-charge.

Communication liaison—This person is in charge of communication in and out of the treatment area. Interhospital networks, dedicated lines to the hospital control center, VHF and UHF monitoring, and outside calls flow through this person for central logging and control.

TRiage OPERATIONS

With an understanding of the philosophy and roles of disaster management, it is now

40 possible to look at the medically related tasks that are to be accomplished during a disaster. The list will proceed along the usual sequence of execution in order to integrate the tasks into the basic system of disaster medical care.

Prehospital triage

Extrication

The initial problem of access to the victims (including the handling of hazardous materials) and removal of any entrapments is usually the responsibility of firefighters acting under the direction of the overall scene commander and not the medical personnel. If, however, there are major delays in extrication or if surgical extrication is necessary, then medical teams (including physicians) will be needed.

BASIC care

The most common problem for field medical personnel is the institution of too much care for individuals too early. If time is spent on any one victim for care beyond that needed to prevent loss of life or readily reversible problems, then another victim may die of a problem that was simple to remedy, eg, hemorrhage or simple airway obstruction. The psychological pressure to stop and render more complete care can be countered with training and by use of mnemonic aids. One such aid was developed by the author for use in New England: the concept of BASIC care, which is described below.

The first level of triage most often entails lifesaving care of only those victims who have signs of life. It is the task of the personnel who follow to provide more definitive life support. This system does allow heroic measures for victims if there are sufficient numbers of rescuers. The task of the first triage person is thus to stop any gross hemorrhage with wrap-around dressings or bandages, reposition victims as necessary (and appropriate) for airway opening (using any adjuncts available) and for increased venous return, cover the victims with

available materials (including outer clothing from the dead) if needed, immobilize cervical spines and flailing limbs (using such techniques as placing rocks beside the head and tying one leg to another or a wrist to a thigh), and place a triage tag on the victim after determining the proper classification of field evacuation priority.

Thus the BASIC mnemonic is created:

- Bleeding control;
- Airway positioning;
- Shock prevention;
- Immobilization; and
- Classification.

The conscious repetition of this word, combined with drill experience, can help keep the stressed rescuer from becoming ineffective in this task. The execution of these steps usually takes less than two minutes per victim.

Primary triage

The medical role of the primary triage personnel is discussed above. These rescuers are assigned this duty by the MTM and function in a designated sector of the disaster site until all victims there are tagged. The rescuers are then reassigned other duties, such as field treatment or transport, by the MTM. The average EMT-A will make errors in classification on the side of increased severity, and this is acceptable. Conditions such as cardiac arrest will be classified as highest priority unless other factors are present that would lead the average person to realize that the victim was irrevocably dead. This classification allows two problems to be resolved: (1) the EMT-A does not have to declare victims to be terminal, and (2) if massive reinforcements arrive quickly, those with cardiac arrest (or deep shock and poor pulse and respirations) can be identified and cared for rapidly.

Victim accounting

As the primary triage is completed (Classification) for each victim, one dog-ear is removed

from the disaster tag. These may be collected or inventoried periodically for a count of victims found, to compare with manifests or other information. The remaining dog-ear is removed at the secondary triage site, where a count of all those evacuated from the field for treatment is available. Victims actually in the treatment areas may be hand counted by the EMTs in charge of each area at the same time that inventories of victim injury types are compiled for hospital assignment consideration.

Secondary triage

At the secondary level of triage, more medical knowledge and experience is usually available, and diagnosis becomes more sophisticated as to the presence of conditions such as great risk of patient shock or rapid deterioration. As victims are evacuated from the site by firefighters and others not actively involved in medical triage or treatment, the MTM reassesses their condition and assigns a treatment area. Medical personnel at the treatment area decide further about resuscitation of the "recently arrested" and the "hopelessly injured" patients, based on elapsed time and available resources. For very large numbers of victims or geographically large areas, this activity may be carried out in several locations under the overall direction of the MTM.

Treatment areas

Clearly marked areas for the treatment of victims of similar severity should be laid out by senior EMTs under the direction of the MTM. The exact method of marking is not significant; the clarity and visibility of the markings are important. This activity takes place early, while primary triage is under way. Priority of assignment of arriving senior EMTs is to the serious-condition area. Victims who can walk, however, may be evacuated from the field early on for assembly, inventory, and reassessment

by a senior EMT at their designated area. One novel way to accomplish this is to use a loudspeaker to announce that all victims who can walk should assemble at a designated area. This activity helps to reduce wandering and removal of victims from the scene by well-meaning bystanders.

Field stabilization

The sophistication of the treatment rendered in the field is dependent upon personnel and supplies. At the lowest level, stabilization of injuries and treatment of shock is expected. Differentiation of head, chest, abdominal, and peripheral injuries, as well as assessment of medical condition, is necessary for hospital allocation. The presence of advanced life support personnel allows invasive therapies with additional stabilization.

Two situations are to be avoided: (1) the removal of individual victims from the site as they are found (unless very long delays between victims are expected); and (2) waiting for medical triage teams from hospitals. The first results in maldistribution of victims to hospitals and possible delays in the transport of seriously injured victims later. The second results in unacceptable delays and does not use the field experience of the EMTs who are already present. There is little need for the presence of physicians or nurses on-site, except for difficult and prolonged extrication problems. These personnel should be assembled in the hospitals, where they can function in their usual environment.

Reassessment

It is implicit in the treatment scheme that victims whose conditions change or who are assessed differently after a more thorough inspection will be transferred among the areas as appropriate. The person in charge of each area needs to be aware of personnel requirement changes as the census changes.

Transport triage

The EMT responsible for this function is designated among the initial personnel on scene. The medical transportation officer (MTO) assigns incoming medical transport vehicles to parking areas, serves as a communications liaison to the hospitals for patient allocation, and maintains the log of patient evacuation from the scene. Based on hospital capability inventories, the MTO participates with the MCO in the allocation of individual patients to the various hospitals. This activity usually does not take place until the most severely injured victims are accounted for, so that an accurate picture of needs is given and so that the hospitals are allowed time to obtain their census information. The MTO, in consultation with the MTM, also designates crews for the vehicles and coordinates any supplementary transportation, such as helicopters or buses, as necessary.

Vehicle location is critical to the MTO, and consideration of ingress and egress is paramount. Details such as access to loading doors and to equipment lockers are also important. Liaison to law enforcement personnel is necessary to secure routes of travel both on scene and to and from hospitals.

En route care

The care needed en route should be minimal in most instances so that the lowest-qualified EMTs may be used for this time-consuming task. There is also a need for minimal radio communication from vehicles to allow the channels to be used for other needs during the disaster. For transport of stable victims, EMT-As are suitable; for those with advanced life support interventions, emergency medical technicians-intermediate (EMT-Is) should be able to adjust and change fluids and perform other more sophisticated monitoring tasks. Since the most seriously injured patients will be transported first, it is critical to ensure maximal advanced life support personnel on

the scene to take care of the remaining victims and subsequent developments.

Hospital triage and treatment*Hospital capability status*

A neglected element of most medical disaster plans is the allocation, if at all possible, of victims to hospitals that have the full resources to care for them. Hospital bed capacity in special and general care, medical specialist availability, and staff backup are critical elements in a plan to minimize retransfers and less-than-optimal care. A system to obtain this information in a rapid and accurate manner is central to the task. It requires the cooperation and support of all the hospitals in the system and can often be obtained through the local hospital association. Reporting mechanisms usually are based on the Hospital Emergency Administrative Radio (HEAR) system common throughout the country, by using a communications person designated at each hospital (often the emergency department secretary).

With the information on census and staff assembled and correlated, triage of victims based on their major system of injury can be accomplished. This is done, in consultation between the MCO and the MTO. With patient medical transportation triage under way (most serious conditions first), transport begins.

Entry triage

The next stage of triage takes place at the hospital entry. The entry triage physician reassesses each victim on arrival and makes a system-oriented diagnosis. Treatment areas and teams will have been positioned in various areas of the hospital based on a system- or mechanism-oriented diagnosis. The victim is given a hospital disaster medical tag at the door by the medical record person and is recorded on the entry log with as much information as is available for use by the public relations person. The administrator-in-charge

remains responsible for any readjustments of areas or resource allocation necessary to customize the hospital's response.

Hospital treatment teams

The treatment team then performs its in-depth assessment of each victim while making any interventions needed to stabilize and prepare the patient for definitive care. Retransfers between treatment areas may also be made here as appropriate, after life-sustaining measures are instituted. With medical care already determined and allocated, there should be little mismatch between victims and capabilities of the hospitals to deal with them. Any mismatch resulting from system shortages or miscommunication should be identified as early as possible, and triage to other facilities should be arranged after stabilization.

TAILORING

Levels 1 through 3 MCIs require varying complexities of the elements described above. Each incident has unique aspects that necessitate customization of the response for each phase.

The prehospital response varies in general with the level of the MCI. In level 1 MCIs, there is usually no need for separate implementation of all positions discussed above. Often the senior EMT at the scene directs ambulance operations, assists with primary and secondary triage, provides victim treatment, and performs communications liaison as the scene MCO. In level 2 MCIs of minimal size, the MTM is often able to perform communications functions simultaneously with the secondary triage function, thus eliminating the MTO as a separate person. In large level 2 and all level 3 MCIs, there will be a need for all positions. If

the scene of the incident is large, there may also be a need for multiple sites for medical care and overall MTMs, MTOs, and MCOs. Communications are critical in these situations since coordination among sites is necessary. A discussion of the expansion of medical command and treatment elements can be found in the article by Morris.⁸

Hospital-based care also needs customizing, but usually not on the basis of sheer numbers of victims, since they will be distributed among hospitals. In this area, tailoring is based on the mechanisms of injury. Violent trauma requires one set of resources, whereas exposure to toxic gas requires a completely different set. Each hospital must be prepared to assemble the necessary resources in an efficient manner. Personnel call lists need to be flexible and brief; supervisors are best to call in first. Specialized carts of materials for disaster care require either duplication or mechanisms for rapid dispersal to secondary areas. The proper mix of specialists needs to be assembled rapidly for assignment to treatment teams by the physician-in-charge. The hospital's central control point must reassign staff under the direction of the administrator-in-charge as positions are deleted or augmentation is required.

. . .

Triage is a continuing process of classifying victim injuries for treatment. From the initial classification of field evacuation priority to the determination of operating room queues, medical triage facilitates increasingly sophisticated decisions about severity of injuries and the ability of the victim to withstand additional periods of time prior to definitive therapy. One system that allows for the sophistication of the medical resources at each phase of mass casualty care is presented here.

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44

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Test Instructions

Test Identification Number T0161

1 Category 1/Contact Hour

This test has been reviewed and approved by the University of California San Diego School of Medicine.

The educational objectives appear at the beginning of the article. There is only one correct answer to each question. To qualify for CE credit, you must have a passing score of 7 correct answers (70%). Please complete the test without referring back to the article.

Enrollees in Current Topics or Review Topics must submit their answers on the authorized forms provided in the registration packet. Persons who wish to receive CE credit for this test only should use the new Single Topics answer form that appears on page vi. Use the Test Identification Number shown above on the form you submit.

Answer forms for Current Topics must be postmarked by February 25, 1986; for Single Topics, by July 25, 1986. The results of your test and the correct answers will be sent to you within 3 weeks of the postmark deadline for Current Topics and within 3 weeks of receipt for Single Topics.

For CE enrollment information see the announcement on page v.

Test Items

1. What level is a mass casualty incident (MCI) in which there are enough victims to overwhelm local and regional resources and thus require federal assistance?
 - a) 1
 - b) 2
 - c) 3
 - d) 4
2. The main purpose of triage at the scene of an MCI is to:
 - a) Give victims lifesaving care
 - b) Sort victims according to severity of injury or priority of treatment needed
 - c) Remove victims from the scene and transport them to appropriate treatment facilities
 - d) Coordinate overall treatment of victims
3. When is the triage process applied?
 - a) Only at the disaster scene during the first few minutes
 - b) Only when the victim enters the hospital
 - c) Only after physician teams arrive at the disaster scene
 - d) Whenever treatment decisions require victim sorting
4. Care of a victim during the primary triage of a level 3 MCI includes:
 - a) Administering drugs
 - b) Administering IV fluids
 - c) Notifying appropriate medical specialists
 - d) Applying a triage tag
5. Basic life support skills include:
 - a) Controlling hemorrhage
 - b) Administering IV therapy
 - c) Inserting endotracheal tubes
 - d) Setting simple fractures
6. At which stage of the triage process is a systems-oriented diagnosis made?
 - a) First level, prehospital triage
 - b) Secondary triage, prehospital
 - c) Transport triage
 - d) Entry triage
7. Several schemes for triage criteria are necessary because of the:
 - a) Caregivers' different levels of medical sophistication
 - b) Types of injuries that require different treatment

THE TRIAGE PROCESS

- c) Multiple injuries a single victim may have
 - d) Lack of agreement among physicians about the proper criteria to use
8. The purpose of collecting information about available treatment facilities before transporting victims is to:
- a) Ensure that victims are equally distributed among available facilities
 - b) Ensure that the most seriously injured are sent to the nearest facility
 - c) Allow time for adequate stabilization in the field
 - d) Achieve the closest possible match of victims' needs and hospital resources.
9. At a large-scale disaster site, the person in charge of assigning ambulance destinations is called the:
- a) Medical transportation officer
 - b) Transportation chief
 - c) Ambulance assignment officer
 - d) Medical triage master
10. What person is in charge of all field medical operations in a disaster?
- a) Hospital administrator
 - b) Medical control officer
 - c) Triage master
 - d) Surgeon