EMERGENCY MEDICAL RESPONSE

Mass Casualty Triage*: Sorting and prioritizing injured victims for treatment and transport

(*-TRIAGE: a French word meaning to "sort" by priority or life-threatening nature of injury)

Many injured victims are present in the scenario. In order to expedite treatment to those most seriously injured, and avoid wasting resources on less seriously injured, a system of rapid "triage" or sorting has been developed called "Special Triage and Rapid Transport" or START. Victims can be quickly evaluated by emergency medical personnel. Initial findings such as vital signs (pulse rate, blood pressure, respiration, level of consciousness) are recorded on the triage tag, and then rechecked periodically thereafter to monitor the victim's status and to RETRIAGE* if their conditions becomes worse, or improves later. ***Responders are accountable for the identity and security of all victims present in the area of the incident. Such persons will not be allowed to leave the area until they are properly identified, evaluated, treated, transported to a medical treatment facility and/or medically cleared for release.***

Priority 1 (Red) Serious but salvageable life threatening injury/illness
: Victims with life-threatening injuries or illness (such as head injuries, severe burns, severe bleeding, heart-attack, breathing-impaired, internal injuries) are assigned a priority 1 or "Red" Triage tag code (meaning first priority for treatment and transportation).

Priority 2 (Yellow) Moderate to serious injury/illness (not immediately life-threatening)
: Victims with potentially serious (but not immediately life-threatening) injuries (such as fractures) are assigned a priority 2 or "Yellow" (meaning second priority for treatment and transportation) Triage tag code.

Priority 3 (Green) "Walking-wounded"
: Victims who are not seriously injured, are quickly triaged and tagged as "walking wounded", and a priority 3 or "green" classification (meaning delayed treatment/transportation). Generally, the walking wounded are escorted to a staging area out of the "hot zone" to await delayed evaluation and transportation.

NON-PRIORITY VICTIMS:

Priority 4 (Blue)
: Those victims with critical and potentially fatal injuries or illness are coded priority 4 or "Blue" indicating no treatment or transportation. **It is important to note that victims of mass casualty incidents (MCI) who are still presenting some vital signs but may have life-threatening or potentially fatal injuries, may be classified as "unsalvageable" by the Triage officer. Although this is a very difficult decision, it is necessary when many casualties require more resources than may be available. It is axiomatic that committing resources to save the life of a person who is most likely to live if cared for promptly, outweighs committing resources to victims who probably will not survive even if such resources are administered. In ordinary emergencies where only a few victims are injured, it is possible for responders to devote sufficient resources to critically injured patients, and to attempt to save their lives by extraordinary medical support and rapid transportation (when possible) to a level 1 or 2 Trauma Center. Such patients often still succumb to their injuries, even after extensive care in hospitals**.

Priority V (Black)
: Victims who are found to be clearly deceased at the scene with no vital signs and/or obviously fatal injuries are classified as deceased or priority 5 (Black) in the triage coding system.

MEDICAL COORDINATION

A Triage Officer coordinates the assignment of ***Triage Teams*** of emergency medical first responders who quickly evaluate and tag patients. Then as sorting continues, first responders are sent in to treat the victims according to tag code.

*** -RETRIAGE**

Retriage occurs when the status of a patient changes either to a worse condition or if they improve to a less life-threatening level. The previous code is crossed out after evaluation, and the new code and vital signs are listed on the triage tag. Patients who have been initially moved to a specific transportation area would then be moved to a greater or lesser priority transportation area after retriage has been concluded.

Medical Treatment and Evacuation

Medical Teams composed of emergency medical first responders enter the area to initiate stabilization and care for victims by triage priority, and to load and evacuate them to a ***Staging area according to priority code.*** For example, all Reds will be moved to a staging and treatment area for immediate transport. Yellows will treated and evacuated after all Reds are properly treated and evacuated.

Transportation of victims

A Transportation Officer coordinates the arrival and assignment of patients to appropriate ground or air transportation. Ambulances and medical helicopters will transport most seriously injured patients (Reds) from the red zone. The transportation officer coordinates with the ***Emergency Medical Officer*** to assign hospital destinations for urgent cases. ***Medical coordination with area hospitals is essential to route most seriously injured patients to level I and II Trauma Centers within a "golden hour" where the victim's survival probability is best if definitive care is begun within an hour of the injury. Care must be taken to not overload trauma centers, and to avoid sending less seriously injured patients to such centers when they can be effectively treated at other area facilities.***

Non-priority victims: deceased or critical/fatally injured victims

A Morgue Officer supervises fatally injured victims who cannot be moved or transported until the Coroner investigates the scene and authorizes removal.

PERIMETERS: Controlling the access to and from the scene of the event

Outer Perimeters: Controlling access to and from the scene

Law enforcement officers are needed to set up a perimeter around the scene to prevent pedestrians and vehicles from entering or driving through hazardous areas. The perimeter may be as large as is necessary to keep spectators away, and permit emergency vehicles to enter and leave without being impaired by "looky-loos" who flock to the scene to see "what's going on." Curiosity of on-lookers can greatly impede rapid response of emergency vehicles by clogging roadways, parking in access points, and failing to yield to emergency vehicles. Most of all, spectators may enter an area which poses serious or fatal hazards due to fire, chemical spill, downed power lines, explosions, etc.

Double "Funnel" for victim transport

Law Enforcement responders working with medical responders will establish a "perimeter" around the scene of the Mass Casualty Incident, often called a "HOT ZONE" An outbound funnel point will be identified as a safe area through which to remove victims to a second perimeter or zone where they are placed in their appropriate "staging" area according to triage coding. No one is allowed through the perimeter of the "HOT ZONE" to avoid misplacing or unsafely moving victims without authorization. Other factors which may affect the establishment of the "HOT ZONE" include hazardous materials spills, fire, downed power lines, dangerous or unstable structures or vehicles.

SCENE SAFETY: protecting the rescuers and victims

The Safety Officer supervises the overall operation in terms of safe conduct of rescue, fire suppression, evacuation, hazardous materials control, etc. If a safety officer observes a potentially dangerous situation which may kill or injure a rescuer or victim, he has authority to cease or modify the operation to prevent further risk.

MASS CASUALTY INCIDENTS: exercise simulations save lives in real m.c.i. events!

Conclusion:

Many first responders can quickly and effectively work together under a unified command system which is universally used and understood, to save lives, and minimize risk of injury and property damage. By exercising such responses in realistic field simulations such as a "mass casualty incident" rescuers become more proficient and capable in real situations.

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