

**REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
All Levels**

SMO: BDLS Triage System (Bioterrorism Event)

Revised Date:

Overview: It is important to remember that this is a triage system that may be used during a bioterrorism event and that it is presented here as informational. Several systems have been proposed for disaster triage and this EMS Region utilizes the START System of triage. The United States Military uses a standardized triage category system but does not specifically address the needs of an MCI. A BDLS Triage System may be used for a bioterrorism event that more or less falls outside the category of the Region's START System.

The BDLS Triage System assists in the triage of large numbers of casualties. It is designed to quickly sort large numbers of casualties that are in close proximity to each other.

TABLE 1.

MASS Triage is a disaster triage system using triage categories with a proven means of handling large numbers of casualties in close proximity to each other.

**M – Move
A – Assess
S – Sort
S – Send**

TABLE 2.

Id-me! Id-me! is a phrase that is easy to remember and incorporates a mnemonic for sorting patients during a mass casualty incident triage. It is used effectively in the MASS Triage model.

**I – Immediate
D – Delayed
M – Minimal
E – Expectant**

MASS Triage: Move

The initial challenge in triage is to accurately determine which patients need immediate lifesaving care versus those who are demanding immediate attention but are not necessarily in the same critical condition.

The first step in triaging a large group of patient is to ask them to move. For example, if a large group of patients has congregated, shout, *“Everyone who can hear me and needs immediate medical attention, please move the area with the green flag.”* Patients who believe that they will receive medical care more quickly and who are ambulatory will most likely move to a designated area. This group of patients would be considered in the Minimal triage group category during this initial step. It is best to remember that the

initial goal is to determine what group of patients requires immediate attention. Triage is a series of assessments, not just 1 initial pass.

The second step of MOVE is to ask the remaining patients to move an arm or leg. For example, say, *“Everyone who can hear me please raise an arm of leg so we can come help you.”* Obviously this group is the group that is probably unable to ambulate but very well may have sufficient vital signs for them to remain conscious and hear and follow instructions. This patient group is considered the initial Delayed group triage category.

Patients who are not moving at all are the first priority for assessment. Obviously, the Expectant patients will be among this group as well. There may also be patients in this group with simple injuries such as ruptured eardrums following an explosion or other hearing impairments, or chronically disabled patients who otherwise were unable to comply with your requests but are not critically injured.

TABLE 3.

MASS Triage: MOVE		
Goal	Action	ID-me! Category
Group ambulatory patients	Announce: “Anyone who can hear my voice and needs immediate medical attention, please move to the area with the green flag.”	Minimal initial group
Group patients who are awake and can follow commands	Tell the remaining patients: “Anyone who can hear my voice please raise your arm of leg so we can help you.”	Delayed initial group
Identify the remaining group of patients	Proceed immediately to these patients and provide immediate life-saving interventions	Immediate initial group

It is important to remember that patients who are able to ambulate should, if at all possible, be prevented from consuming health care resources that are desperately needed for the more critically injured. This group must be actively managed and not be allowed to disperse and demand that their health care needs are immediately met. Actively managing and providing on-site care for minimally injured patients allows the health care system to be unencumbered with a large influx of minimally injured patients.

MASS Triage: Assess

Once the steps outlined in MOVE have been completed, the next step is to ASSESS. Immediately identify those patients who were unable to complete the first 2 steps, and assess them first. This group is considered the initial Immediate group, and consists mainly of those patients who need immediate life-saving interventions.

The Immediate patients (those unable to move) are the first priority. The patients in the Delayed group (not ambulatory but able to follow the command to move a limb) are the second priority. The third patient category to be assessed are those in the Minimal group (able to ambulate). Expectant is the fourth category of patient (who are not breathing). Patients in each category are assessed according to anatomic and physiologic variables to further define their triage category.

The initial foci for the Immediate group are airway, breathing and circulation (ABC). The health care provider should check for unresponsiveness, and if present, the airway should be opened and breathing assessed. Patients who are breathing but unresponsive are classified as either Immediate or Expectant depending upon the severity of the injury.

If a quick initial survey of the victim reveals wounds that are likely fatal, the patient is considered Expectant. If initial examination reveals a non-breathing patient as a result of a traumatic event, the likelihood of survival for this patient approaches zero, and using precious and limited resources is unwarranted.

TABLE 4.

<p>Mass Triage Model – Assess</p> <p>First, go to the Immediate group</p> <ul style="list-style-type: none"> • Identify location of victims who are unable to ambulate and respond to commands <p>Rapidly assess ABCs:</p> <ul style="list-style-type: none"> • Is the airway open? Open manually if possible • If not, designate the patient as Expectant and go on to the next patient • Is uncontrolled bleeding present? Apply direct pressure • Is it likely the patient has incurred a fatal injury? • If yes, designate the patient as Expectant and go on to the next patient <p>Treat immediate life-threatening conditions if the victim is not in the Expectant group</p> <p>Obtain an accurate count of Immediate patients</p> <p>Is transport available for the patient? ...Move on</p>
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MASS Triage: Sort

After the ASSESS phase and immediate life-threatening interventions have been completed, the next step is to SORT the patient into 1 of 4 categories. ID-me is an easy to remember phrase that incorporates a mnemonic for sorting patient during an MCI into ImmEDIATE, Delayed, Minimal and Expectant groups. Refer to Table 2.

For each triage group, it is important to remember that the most serious injury present requires immediate attention and that triage is dynamic. For example, after successfully managing the life-saving interventions of the only 2 Immediate patients at a scene, the previously Delayed group becomes that group of patient in need of immediate attention. On-scene triage is in continuous flux until the moment the last patient is transported from the scene.

ImmEDIATE patients are those who have an obvious threat to life or limb. Most often these are patients with some complication in their ABCs, such as being unable to maintain an adequate airway or having inadequate or labored breathing, uncontrolled bleeding, a pulseless, non-moving extremity, or extensive head, chest or abdominal trauma. Immediate patients are the first priority for evacuation and are potential candidates for air evacuation to facilities capable of providing adequate care. Among other signs, a patient should be placed in the Immediate group if they are unresponsive, have an altered mental status, respiratory distress, uncontrolled hemorrhage, amputations proximal to the elbow or knee, sucking chest wounds, unilateral absent breath sounds, cyanosis and rapid weak pulses.

Delayed patients are those who clearly need medical care, but should not decompensate rapidly if care is initially delayed. Patients in this category would be those with deep lacerations with controlled bleeding and good distal circulation, open fractures, abdominal injuries with stable vital signs, amputated fingers, anginal chest pain, or hemodynamically stable head injuries with an intact airway. They must be transported to the hospital following the Immediate patients.

Minimal patients are the “walking wounded”. These ambulatory patients are those with abrasions, contusions, minor lacerations, etc., who have stable vital signs, and for whom a delay in care even for several days would not have any serious ill effect. This group of patients can often be helped by nonphysician medical personnel, at least for some period of time. They may also be capable of acting as on-site volunteers to assist with the care of the other patients. They can generally be transported to a secondary treatment facility whose purpose is to draw the minimally injured and “worried well” away from hospitals so that emergency departments are able to care for critically ill patients.

Expectant patients are those with little or no chance of survival, and therefore resources are not utilized initially for their care, unless resources become available. This category is often thought of as the group of people who won’t survive no matter what the treatment, and so some mistakenly think that you do nothing for them. This is incorrect! All patients deserve care, but during an MCI the allocation of that care must do the most good for the most people. Therefore, patients who are in the Expectant category who are still alive (after all the Immediate patients are evacuated) may be reclassified as

Immediate, depending on the resource needs of the Delayed group. Expectant patients also need to be transported to the hospital when resources become available. Comfort care, when resources allow, should be provided to the Expectant group. An Expectant group patient does not imply that death is minutes away; for instance, patients with a 100% total body surface (TBSA) burn have a dismal survival rate, but may survive for hours after the injury. Victims of fatal doses of radiation may survive for days after the exposure. The care for these patients simply must be on an “as-available” basis so that they do not consume resources needed for those who have a chance of long-term survival.

MASS Triage: Send

Once SORT is operational, while treatment is ongoing, it is important to focus on SEND, or the transport of patient away from the scene. Available options, based on triage category and clinical status, are that patients are (1) treated and released at the scene if this is acceptable to your local/area/state directives, (2) sent to hospitals or secondary treatment facilities, or (3) sent to morgue facilities.

Transportation often requires creative thinking. In almost all disasters, large numbers of patients will self-transport to health care facilities by whatever means possible. Immediate patients are candidates for air transport when available, or ambulance when not. Depending upon the injury, Delayed patients may be candidates for ambulance or bus transport to the hospital. Minimal patients can usually be transported by whatever means available, including putting a Minimal ambulatory patient in an ambulance with an Immediate patient, or placing both on a bus.

Precautions and Comments:

As stated in the Overview, this is a BDLS triage system that is and can be used in MCIs, and can be a model for bioterrorism events. It is not the sole triage system but it is felt that Region EMS personnel should be aware of this model and have some understanding of terminology and methodology of the BDLS triage system.

It is incumbent that the EMS personnel in the Region are familiar with their local/area/state guidelines for bioterrorism event mitigation and maintain up-to-date knowledge as to how that type of event will be handled.