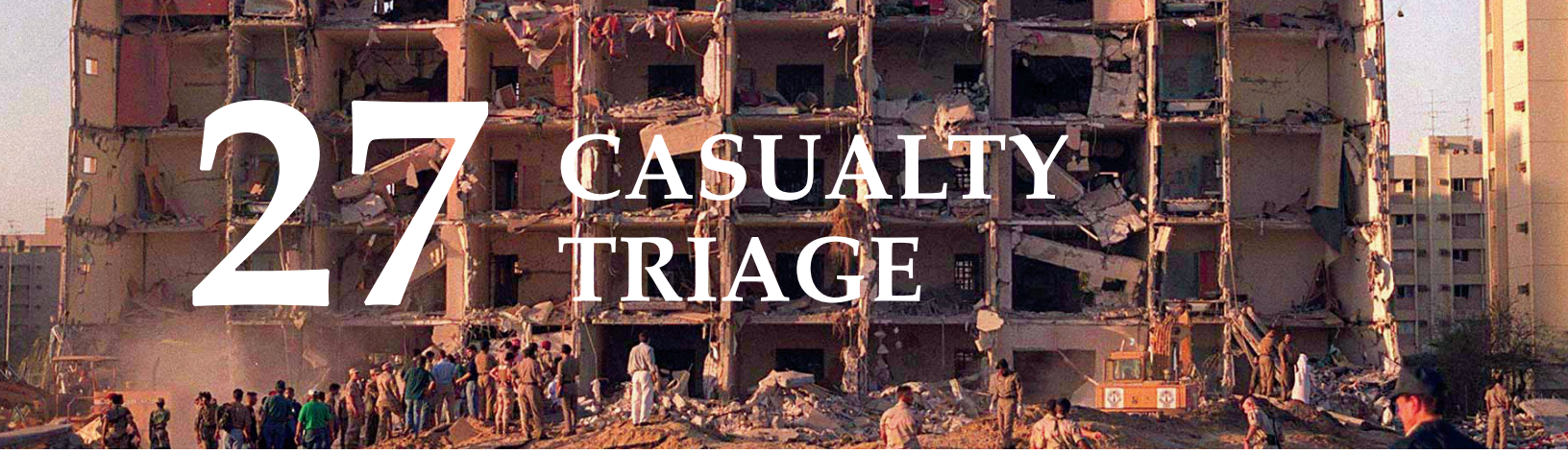

27 CASUALTY TRIAGE

CORE CONCEPTS

- Discuss the principles of triage.
- Describe triage categories.
- Apply triage principles to casualties in battlefield scenarios.
- Explain how to establish a casualty collection point.

INTRODUCTION

Combat medics operating in a combat theater may be overwhelmed with casualties, whether soldiers are lined up for daily sick call or incapacitated after an explosion. Therefore, a process of sorting these casualties must be established. Medics must know whom to treat first, who has the most severe wounds, and who is most likely to survive. Familiarity with the tactical situation and the overall mission, as well as available resources, will help guide decisions. **Triage** is an attempt to impose order during chaos and make an initially overwhelming situation manageable. Triage ensures that medical resources are used to provide care that affords the greatest number of casualties the best chance of survival. Triage is a dynamic process that continues as a casualty moves through the different roles of care.

TRIAGE OVERVIEW

On a battlefield with multiple casualties, the casualty with the most severe injury or the greatest threat to life is not necessarily the one who receives first priority for treatment; the casualty's likelihood of survival must be evaluated.

There are three triage principles that form the foundation of casualty care and treatment priorities:

1. Triage is the medical sorting of casualties according to the type and seriousness of the injury, likelihood of survival, and the priorities of treatment and evacuation.
2. Triage ensures that medical resources are used to provide care for the greatest benefit to the largest number of casualties.
3. Triage affords the greatest number of casualties the greatest chance of survival.

The overall goal of casualty triage is to treat and return to duty the greatest number of soldiers in the shortest possible time. This returns the highest number of soldiers to combat effectiveness, giving the commander more assets with which to defeat the enemy. Familiarity with the principles of casualty triage will help you render vitally important emergency medical care to soldiers promptly and will reduce the number of soldiers who may die of wounds. It is essential to realize that you will not always be able to bring everyone home. Using triage principles can help mitigate that reality.

Triage is critical and always applied in mass casualty (**MASCAL**) situations, when the number of casualties exceeds the available medical capacity to treat and evacuate them rapidly (Figure 27-1). The actual number of casualties varies from situation to situation, and the approach to treating them depends on the tactical situation, mission, and available resources. Technically, a MASCAL situation occurs if a combat medic has more than one seriously wounded soldier to manage at one time. It can occur in multiple locations with varying resources—at a major medical center with full medical capabilities, on a forward operating base with a military treatment facility (MTF), or at a combat outpost with minimal resources. Every situation is different, and casualty care priorities depend on various

Figure 27-1. A MASCAL event. A terrorist attack on the Khobar Towers housing complex on June 25, 1996, using a vehicle-borne improvised explosive device. The attack killed 19 people, including many US military members, and injured countless others. Courtesy of Air Force Installation and Mission Support Center Public Affairs. https://www.dvidshub.net/image/4488391/khobar-towers-saudi-arabia

factors, such as the number of self-aid and buddy-aid personnel, available medical supplies, and the number of casualties. The commitment of resources should be based on the mission and immediate tactical situation first, and then by medical necessity, regardless of a casualty's nationality or combatant status.

MASCAL situations rapidly overwhelm multiple levels of care and evacuation capacity. During MASCAL situations, where an active threat still exists, medical personnel may be alone in their efforts to treat casualties while nonmedical personnel are actively engaging the enemy. This lack of assistance during a firefight will increase stress levels on combat medics and can result in a MASCAL situation. MASCAL scenarios demand a rapid transition to critical thinking and prioritizing of personnel and resources to benefit the largest number of casualties. The transition requires assessment of site and evacuation capabilities. Use of a MASCAL response plan guides transition and helps ensure that all requirements are met.

Combat medics have critical duties in casualty triage. You must survey and classify casualties for the most efficient use of available resources (medical personnel, supply capabilities, and evacuation assets) and evaluate the likely outcome of an individual casualty before committing limited medical resources. Your duties include the following:

- Observe the number and location of the casualties and then assess the severity of injuries. Keep in mind that time constraints may not allow time-intensive procedures (eg, cardiopulmonary resuscitation).
- Use any assistance available, such as self aid, buddy aid, combat lifesaver, other medical personnel, and even minimally injured casualties, prior to their return to duty.
- Determine the number of injuries by type (eg, litter or ambulatory).

- Identify evacuation resources with respect to time, distance, and terrain (eg, ground or air assets).
- Assess resupply capabilities and requirements with respect to time, available medical equipment, and supplies.

Direct treatment first toward the casualties who have the best likelihood of survival by assigning each one an appropriate triage category. Locate troops with minor wounds and return them to duty. You have a major role in returning the greatest possible number of soldiers to combat as quickly as possible, while preserving life, limb, or eyesight for others.

Note: Triage establishes the order of treatment, not whether treatment is given, regardless of the injury. Triage is usually the responsibility of the senior medical person present. Casualties may not always fit into one clear triage category. It is incumbent upon senior medical personnel to triage to the best of their ability and medical experience.

Your triage responsibilities may change depending on location. If you are working at a Role 1 battalion aid station (BAS) or at an MTF, you may have limited triage responsibility. The senior medical person is responsible for the base or area of operation's MASCAL plan. Coordinate and rehearse the MASCAL plan with your tactical leadership prior to a MASCAL. If you are working in an isolated area (eg, at a combat outpost, on a tactical patrol, or in a convoy operation), you may be the primary decision maker who must perform many triage, treatment, and evacuation tasks.

Check on Learning

1. What is a MASCAL situation?
2. What are the main responsibilities of medical personnel during triage?

TRIAGE CATEGORIES

Casualties with conventional wounds and injuries are sorted into four triage categories or priorities: (1) immediate, (2) delayed, (3) minimal, and (4) expectant. Because triage is an ongoing process of reassessment, a casualty's category may change.

Immediate

Casualties in this category are the highest priority. Their conditions demand immediate resuscitative treatment to save their lives. Casualties in this category present with severe, life-threatening wounds. Generally, the procedures used to correct these conditions are of short duration and are economical in terms of medical resources. Stabilize all immediate casualties first, before treating injuries that are not life- or limb-threatening. Salvage of life takes priority over salvage of limb. Examples of injuries in the immediate category include the following:

- massive, uncontrolled external bleeding (eg, amputations or junctional wounds);
- threat of loss of limb (eg, risk of amputation or multiple extremity amputations);
- hypovolemic (hemorrhagic) shock;
- airway obstruction or potential compromise;
- open pneumothorax (sucking chest wound) with respiratory distress;
- tension pneumothorax;
- torso, neck, or pelvis injuries with shock;
- head injury requiring immediate decompression (eg, intracranial hemorrhage);
- **retrobulbar hematoma**;
- unstable abdominal wounds with shock; and
- any burns of the face, neck, hands, feet, perineum, or genitalia.

Delayed

Casualties in the delayed category are those who have less risk of losing life or limb if treatment is withheld for a period. This group includes those who require surgery but whose general condition permits a delay in treament without unduly compromising the likelihood of a successful outcome. When medical resources are overwhelmed, soldiers in this category are held until care is provided to the immediate cases. Sustaining measures will be required for casualties while they are waiting (eg, fluid resuscitation, fracture stabilization, administration of antibiotics, pain relief). Examples of injuries in the delayed category include:

- maxillofacial wounds without airway compromise;
- open chest wounds without respiratory distress;
- blunt or penetrating torso injuries without signs of shock;

- eye and central nervous system injuries;
- soft-tissue wounds requiring **debridement** and without significant bleeding (all combat wounds will require some form of debridement);
- fractures;
- burns that cover 20% or more total body surface area (TBSA);
- survivable burns without an immediate threat to life (airway, respiratory) or limb; and
- genitourinary tract disruption.

Minimal

Casualties in the minimal, or ambulatory, category are also called the "walking wounded." Patients in this group have relatively minor injuries (eg, minor lacerations, abrasions, fractures of small bones, and minor burns). They can adequately care for themselves or require minimal medical care, such as would cleansing, minimal debridement under local anesthesia, administration of tetanus toxoid, and first-aid dressings. Often they can be managed by self aid or buddy aid. These casualties may also be able to assist with movement or care of other injured personnel.

Minimal casualties must quickly be directed away from the triage area to uncongested areas, where first aid and nonspecialty medical personnel are available. Casualties in this category usually are not evacuated to an MTF.

If a MASCAL incident occurs near an MTF, these will likely be the first casualties to arrive, bypassing or circumventing the casualty evacuation chain. Such casualties may inundate the facility, leading to early commitment and ineffective use of resources. It is imperative to secure and strictly control access to the MTF immediately when notified of a MASCAL event to prevent such occurrences.

Most casualties fall into the minimal category. Examples of injuries in the minimal category are:

- minor lacerations or abrasions;
- contusions;
- sprains and strains;
- minor combat stress reactions;
- first- or second-degree burns under 20% TBSA and not involving critical areas such as hands, feet, face, genitalia, or perineum;
- upper extremity fractures without neurovascular compromise;
- suspicion of blast injury (eg, ruptured tympanic membrane); and
- symptomatic but unquantified radiation exposure.

Expectant

Expectant casualties are those so critically injured that even advanced and prolonged treatment is unlikely to save their lives. This group, given the situation and resource constraints, is considered unsalvageable. During a MASCAL situation, they would require an unjustifiable expenditure of limited resources that are best used for saving the lives of several other soldiers. Separate expectant casualties from the view of other casualties; however, do not abandon them. Above all, attempt to make them comfortable by whatever means necessary and attend to their palliative needs. Examples of injuries in the expectant category include:

- unresponsive casualties with penetrating head wounds and signs of impending death;
- absence of vital signs;
- mutilating explosive wounds involving multiple anatomical sites and organs;
- profound shock with multiple injuries;
- open pelvic injury with uncontrolled bleeding;
- agonal respirations;
- convulsions and vomiting within 24 hours after radiation exposure;
- burns, mostly third degree, covering more than 85% TBSA (80% or more of TBSA when resources are limited);
- cervical (high) spinal cord injuries; and
- transcranial gunshot wounds with coma.

Note: Casualties with cardiorespiratory arrest on the battlefield would likely be classified as expectant, contingent on mission, battlefield situation, number of casualties, available support, and other factors.

CATEGORIES OF EVACUATION PRECEDENCE

After performing casualty triage and treatment, place the casualty in one of four evacuation categories: urgent and urgent surgical, priority, routine, or convenience. Casualties will be evacuated to ensure the greatest survivorship and to maximize resources available at the triage area. These categories are also used to ensure that the right assets are allocated for casualty transportation.

Urgent (Priority I)

The urgent evacuation category is assigned to emergency cases that should be evacuated as soon as possible and within a maximum of 1 hour to save life, limb, or eyesight; to prevent complications of serious illness; and to avoid permanent disability.

Urgent Surgical (Priority Ia)

The urgent surgical evacuation category is a subclassification of a priority I surgical evacuation. It requires far forward surgical intervention to save life, limb, or eyesight. Casualties must be stabilized prior to being evacuated to a higher role of care. The time for evacuation for urgent surgical evacuation is the same as for urgent, priority I (within a maximum of 1 hour).

Priority (Priority II)

The priority evacuation category is assigned to sick and wounded personnel requiring prompt medical care. It is used when the individual should be evacuated within 4 hours, or if their medical condition could deteriorate to such a degree that they will become elevated to an urgent category. Casualties or patients who require special treatments not available locally, or who are suffering unnecessary pain or disability, are also evacuated under the priority category.

Routine (Priority III)

The routine evacuation category is assigned to sick and wounded personnel requiring evacuation; however, their condition is not expected to deteriorate significantly. The sick and wounded in this category should be evacuated within 24 hours.

Convenience (Priority IV)

The convenience evacuation category is the lowest evacuation level. It is assigned to patients whose evacuation is a matter of medical convenience rather than necessity, and there is no time limit.

Check on Learning

3. What are the four categories of triage used for conventional battlefield casualties?

TRIAGE ASSESSMENT

There are several different triage approaches. Determining which to use may depend on the current tactical situation or on an organization's standard operating procedures. The modified simple triage and rapid treatment approach (START) is one approach that depends on whether or not the casualty can walk (ambulate), is responsive, is breathing, and has a palpable radial pulse. This technique does not work well when there is low light or excessive noise.

In the first decision step, ask all casualties who are able to get up and walk to a designated area for eventual secondary triage. Categorize these casualties as minimal.

Next, assess casualties in the order in which they are encountered. Check for responsiveness to shaking and shouting. If the casualty is conscious, assess the radial pulse and ease of breathing. A conscious casualty with no radial pulse (hemorrhagic shock) and respiratory distress is immediate; perform life-saving interventions immediately. A conscious casualty with a palpable radial pulse and comfortable breathing (unassisted) is delayed.

In the unconscious casualty who is breathing, address the airway with simple maneuvers. A casualty with a patent airway (with or without simple maneuvers) and spontaneous respirations is minimal. An unconscious casualty who is breathing but has a guarded airway that requires a supraglottic airway (eg, i-gel® [Intersurgical Inc, East Syracuse, NY]), endotracheal tube, or cricothyroidotomy is categorized as expectant.

Note: START is a technique for initial triage. All casualties must be continually reassessed for a potential change in category. Time, resources, and arrival of evacuation assets and personnel can quickly move an expectant casualty to an immediate category.

APPLYING TRIAGE IN COMBAT

Triage During Care Under Fire

When providing triage during care under fire, return fire as required or directed. Casualties should also return fire if they are able. Once fire superiority is achieved, and it is safe to do so, triage casualties. Determine the scene safety and security and the number of

casualties (for the squad leader ammunition/casualties/equipment [ACE] report).

Give a command such as "If you can hear my voice and can walk, move to this area now," to sort out the minimal casualties. Then give a command such as "If you can hear my voice but cannot walk, raise your hand to let me know," to determine which casualties can be considered delayed. Request additional help; call for squad members and combat lifesavers to assist.

Those who remain are immediate, expectant, or deceased. Distinguish between the remaining casualties by assessing massive hemorrhage, airway, respirations, circulation, and hypothermia or head injury (MARCH). First, stop life-threatening hemorrhage using tourniquets.

Perform or direct an assistant to perform immediate treatments and move casualties to a secure area (eg, a previously established casualty collection point [**CCP**]). Airway and breathing management is best deferred until you are behind cover and no longer under the threat of effective hostile fire (tactical field care). Perform a MARCH assessment at the triage point of the CCP to account for the casualties who have already been treated.

Check on Learning

4. You are presented with the following casualties:
   a. A conscious casualty with airway obstruction.
   b. A casualty with an injured forearm and second-degree burns to 9% TBSA.
   c. An unconscious casualty with severe burns to the hands.
   d. A casualty with a closed femur fracture and no signs of shock.
   e. A casualty with a transcranial gunshot wound.

   Place each casualty in the appropriate triage category.

Casualty Collection Points

A CCP location is dependent on the unit location, the tactical situation, and the number of casualties to be evacuated. When combat units are executing combat operations, the company's first sergeant, with guidance from the company or platoon combat medics, determines where to set up the company CCP. Normally, the location of a company or platoon CCP is in the rear of the formation, in a position of cover and concealment.

During combat operations, treat casualties at or near the point of injury (**POI**) as tactical conditions allow and then move them to a platoon or company CCP. On arrival at the CCP, casualties will be triaged and placed in the appropriate treatment area for additional medical care and preparation for evacuation to the Role 1 BAS or higher, as needed.

Note: Doctrinally, a Role 1 BAS is set up approximately 1 to 4 km and/or one or two terrain features behind the lines of the units supported.

Removing the casualties from the POI is crucial, and getting them to a CCP begins the triage process. Movement of the casualty from the POI to the CCP can be accomplished with field-expedient means such as individual manual carries or drags, casualty litters, medical evacuation (MEDEVAC) vehicles, or nonstandard casualty evacuation (CASEVAC) vehicles. Use the unit's tactical standard operating procedures (TSOPs) for guidance on how to move the casualty from the POI to the CCP. The company first sergeant coordinates the casualty flow between the platoon CCPs and the company CCP, while the company senior medic conducts triage.

Shortly after the casualty arrives at the CCP, the combat medic will relay specific information to the platoon sergeant and platoon leader so that the 9-line MEDEVAC request can be completed and forwarded. Triage is ongoing and occurs through all levels of care in the tactical field care setting. Evacuate casualties to the next level of care in an order that ensures the highest survivability of casualties while optimizing use of available resources at the triage area. If evacuation vehicles are en route, determine who needs evacuation and who can be treated at the triage area. These decisions facilitate efficient triage and treatment.

Triage, Treatment, and Evacuation at the Casualty Collection Point

A triage area should be set up for efficient casualty flow (Figure 27-2). As the triage area is being set up, a triage point must be established, which will create a single entry and exit point into and out of the CCP (for tracking casualties and controlling access). Each casualty flows into the CCP and undergoes a rapid evaluation by the initial triage officer. After initial triage, they are taken to their triage category area. Each triage area's category (immediate, delayed, minimal,

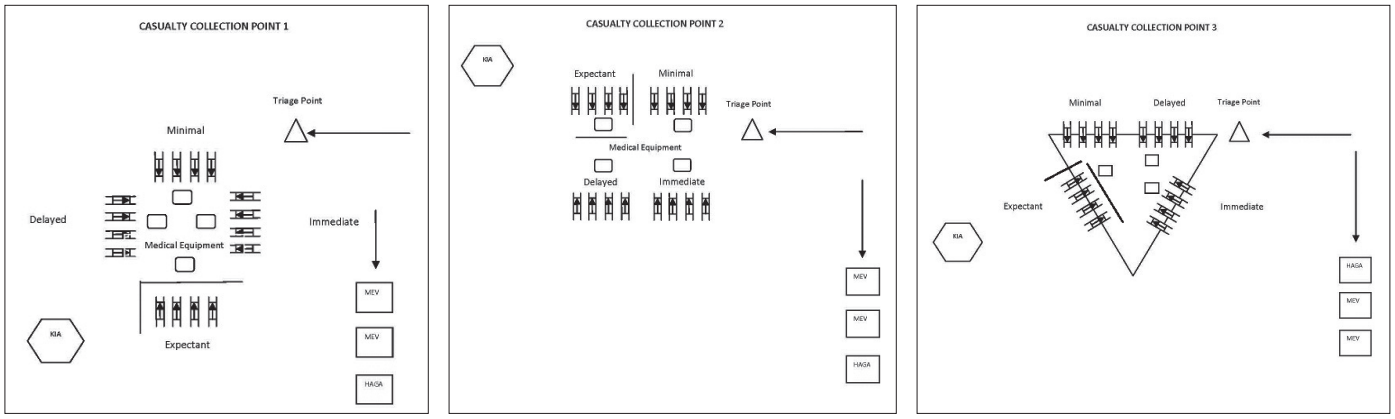

Figure 27-2. Three examples of casualty collection point layouts. Each has a single triage point and is set up for clear and efficient patient flow.

and expectant) should be marked with a day and night marking system as shown in the following examples:

- Immediate—red day marking and single infrared chemlight for night tactical.
- Delayed—yellow day marking and two infrared chemlights for night tactical.
- Minimal—green day marking and three infrared chemlights for night tactical.
- Expectant—black day marking and four infrared chemlights for night tactical.

Markings may differ among units (eg, colored or infrared chemlights or specific markings for chemical, biological, radiation, or nuclear casualties), and each will use the marking system outlined in its TSOP.

Ideally, each section will have at least one combat medic on duty. Sections should set up unidirectional flow to prevent clogging the system. Treatment should be limited in the triage area to hemorrhage control, maintaining airways, and needle decompressions. An ideal triage area will have the following features:

- Close proximity to the receiving area—a clearing where a helicopter landing zone can be established, a site suitable for ground evacuation, and decontamination areas. This will reduce the distance litter bearers must travel.
- Separate triage areas for contaminated casualties.
- One-way flow into and out of the triage and treatment areas.
- A well-lit, covered, and spacious area for easy access, evaluation, and transport of incoming and outgoing casualties.
- A designated area and one-way flow for vehicles dropping off and picking up casualties.
- Casualty recorders available to identify, tag, and record initial triage or disposition.
- Sufficient litter bearers controlled by someone other than the designated triage combat medic.
- A medical resupply area that has a robust supply of emergency medical equipment.

Establish the expectant area away from all other treatment areas to reduce stress and anxiety among casualties and the other attending combat medics. Do not leave casualties in the expectant area alone. A combat medic should be available to provide pain control. Chaplain's staff should also have quick, easy access. Treat all other casualties and then retriage these casualties and initiate the appropriate treatments.

Note: When setting up a CCP, be sure to identify an area away from the other casualties for any individuals killed in action.

Check on Learning

5. For a large MASCAL situation, how many treatment categories are necessary?
6. What treatment can be performed in the triage areas?
7. When are expectant casualties treated?
8. Place the following casualties into one of the four triage categories.
   a. Painful leg and ankle.
   b. A conscious casualty with no radial pulse, but a present carotid pulse.
   c. A conscious casualty with a palpable radial pulse and comfortable breathing.
   d. A casualty with burns to his face, neck, and hands.

e. A casualty who is curled up in a ball and crying.
f. A casualty with an obvious open abdominal evisceration, palpable radial pulse, and no breathing difficulty.

DISPOSITION OF THE DEAD

Death is one of the most challenging and emotional experiences you will encounter. Under normal circumstances, the physician is responsible for declaring a person dead, and is required to sign the death certificate. US laws require a death certificate for each soldier who dies on the battlefield.

When a soldier is killed in action and subsequently identified, a spot report is generated, identifying the location of the remains. When the battle is over, the remains are recovered and turned over to mortuary affairs. The transportation and disposition of remains are a quartermaster function. Air and ground ambulance personnel do not clear the battlefield of remains, nor do they carry remains in their dedicated medical vehicles or aircraft. Medical units do not accept remains or provide temporary morgues in which to hold remains for other units until they can be transferred to mortuary affairs sites or personnel.

The only remains a medical unit handles are those of its own unit members, casualties who are dead on arrival, or those who died of wounds while in its care. Whenever a medical unit must establish a temporary morgue it should be out of sight of the triage and treatment areas (eg, behind a natural barrier such as a stand of trees), or set off by using a tent and tarps. This area will not be an actual morgue because it has neither the required equipment nor staff. It is only a temporary holding area until the quartermaster can assume custody of the remains.

AMBULANCE SHUTTLE SYSTEM

The ambulance shuttle system is an effective and flexible method of employing ambulances during operations. The ambulance shuttle system includes:

- Ambulance loading point—a point in the shuttle system where one or more ambulances are stationed and ready to receive patients for evacuation.
- Ambulance relay point—a point in the shuttle system where one or more empty ambulances are stationed to advance to a loading point or to the next relay post to replace departed ambulances.
- Ambulance control point (if necessary)—a station usually located at a crossroad or road junction, where ambulances are directed to loading points and MTFs.

These components are echeloned forward from the principal group of ambulances, the company location, or basic relay points as tactically required.

Note: The need for ambulance control points are dictated by the situation; they are more necessary in forward areas.

In the establishment of the ambulance shuttle system, relay points are designated, and the required number of ambulances are stationed at each point. If the tactical situation permits, the ambulances may be delivered to the relay points by convoy.

Advantages of the ambulance shuttle system are the following:

- Facilitates ambulance placement at CCPs and BASs as needed.
- Permits a steady flow of patients through the system to the MTFs.
- Avoids unnecessary massing of transport in forward areas.
- Minimizes the danger of damage to ambulances by the enemy.
- Permits the commander or platoon leader to control their elements and enables them to extend their activities without advancing the headquarters.
- Facilitates administration and maintenance of ambulances.
- Maximizes the use of small command elements (sections or platoons) to operate the shuttle without employing the entire parent unit.
- Provides for flexible use of other ambulance assets for specific situations.
- Facilitates medical resupply (blankets, litters, and patient movement items [PMI]) through staffed ambulance relay, loading, and control points.
- Facilitates communication of important information to ambulance crews at each point in the system.

AMBULANCE EXCHANGE POINT

An ambulance exchange point (**AXP**) is defined as a location where a patient is transferred from one ambulance to another en route to an MTF. This reduces the distance the forward deployed ambulance must drive because it does not have to go all the way to the MTF. This allows them to make shorter, more frequent trips to pick up additional casualties at the Role 1 BAS. AXPs are normally preplanned and a part of the health service support appendix to the operation plan (OPLAN).

AXPs are used for both ground and air ambulances. For example, casualty transport using both ground and air ambulances may be the best option when the enemy antiaircraft threat is very high. In this case, the Role 1 BAS ambulance drives the casualty out just beyond the enemy's antiaircraft reach, sets up, and transfers the casualty to an air ambulance. The air ambulance then transports the casualty to the next level of care. An AXP between two air ambulances is another casualty transport option. Combat planners will determine the need for an AXP between two air ambulances when there is a long distance between the combat units and the MTF.

Caution: AXPs established in the forward areas are at great risk of enemy attack. Their locations should be frequently changed to preclude attracting enemy fire.

Check on Learning

9. The transportation and disposition of the dead are a function of what group?
10. What is a temporary morgue?

SUMMARY

Casualty triage comprises a set of important skills that enable combat medics to maximize scarce resources while providing prioritized medical care. Not all casualties will return home, but the principles discussed in this chapter will give you the best chance to help both people and mission. Knowing the steps of performing casualty triage will enable you to make wise decisions, giving the greatest number of casualties the greatest chance of survival.

KEY TERMS AND ACRONYMS

AXP. Ambulance exchange point.
CCP. Casualty collection point.
Debridement. The medical removal of damaged tissue or foreign objects from a wound.
MASCAL. Mass casualty. When the number of casualties exceeds the available medical capacity to treat and evacuate them rapidly.
POI. Point of injury.
Retrobulbar hematoma. A condition that involves blood congestion deep in the soft tissue of the posterior orbital septum.
Triage. The medical sorting of casualties according to the type and seriousness of the injury, likelihood of survival, and the priorities of treatment and evacuation.

CHECK ON LEARNING ANSWERS

1. What is a MASCAL situation?

   When the number of casualties exceeds the available medical capability to treat and evacuate them rapidly.

2. What are the main responsibilities of medical personnel during triage?

   If you are working at a Role 1 BAS or at an MTF, you may have limited triage responsibility, but you will still work as a member of a treatment or evacuation team. If you are working in an isolated area (eg, at a combat outpost, on a tactical patrol, or in a convoy operation), you may be the primary decision maker who must perform many triage, treatment, and evacuation tasks.

3. What are the four categories of triage used for conventional battlefield casualties?

   Immediate, delayed, minimal, and expectant.

4. You are presented with the following casualties:
   a. A conscious casualty with airway obstruction,
   b. A casualty with an injured forearm and second-degree burns to 9% TBSA,
   c. An unconscious casualty with severe burns to the hands,
   d. A casualty with a closed femur fracture and no signs of shock, and
   e. A casualty with a transcranial gunshot wound.

   Place each casualty in the proper triage category

   Immediate: Casualties a and c.

   Delayed: Casualty d.

   Minimal: Casualty b.

   Expectant: Casualty e.

5. For a large MASCAL situation, how many treatment categories are necessary?

   Four: immediate, delayed, minimal, and expectant.

6. What treatment can be performed in the triage areas?

   Hemorrhage control with deliberate tourniquets or hemostatic agents, airway establishment (cricothyroidotomy), and needle decompression.

7. When are expectant casualties treated?

   After all other casualties are treated, retriage expectant casualties and initiate treatment if appropriate.

8. Place the following casualties into one of the four triage categories.
   a. Painful leg and ankle—*minimal.*
   b. A conscious casualty with no radial pulse but a present carotid pulse—*immediate.*
   c. A conscious casualty with a palpable radial pulse and comfortable breathing—*minimal.*
   d. A casualty with burns to his face, neck, and hands—*immediate.*
   e. A casualty who is curled up in a ball and crying—*minimal.*
   f. A casualty with an obvious open abdominal evisceration, palpable radial pulse, and no breathing difficulty—*delayed.*

9. The transportation and disposition of the dead are a function of what group?

   Transportation and disposition of remains are a quartermaster function.

10. What is a temporary morgue?

    A temporary holding area for remains. It does not have the required equipment or staff of an actual morgue.

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