



Figure 4-6. Example of triage tag, front and back. (Shown, with permission, from the *Journal of Civil Defense*.)

when ambulances arrive, assigns victims for transport in order of relative priority based on the urgency of their condition. Generally, a typical ambulance can transport more than one victim (eg, one immediate plus one or two delayed victims) depending on the stretcher and seating capacity of the ambulance and the level of attention required by the victims en route.

The distribution of victims to area hospitals differs significantly during a disaster compared with normal operations. Normally, destination may be determined by protocol factors, such as nature of problem, proximity to a given facility, or patient preference. Multicasualty events require victims to be *distributed* to area hospitals on a rotation protocol or according to each facility's capability to receive victims. This prevents the closest hospital from being inundated with large numbers of victims while more distant facilities remain idle.

Distribution can be accomplished by centrally coordinating destination assignments through the central dispatcher (if communications remain intact) or through the transport officer, who maintains a log of each departing ambulance's destination. The advantage of central coordination is that individual hospital capacity information can be solicited by dispatch personnel more easily than by on-scene rescue workers. If

feedback information is unavailable, a simple rotation protocol may be used.

Public Safety

Public safety involves protecting the public from hazards at the scene and allowing the rescue effort to unfold unimpeded by interference from the crowd. Most urban multicasualty events managed by EMS underutilize public safety personnel (ie, police and firefighters). Although firefighters have a prominent role when a hazard is present (eg, fire, explosion, collapse), an event that is predominantly medical presents a less clear role for them unless they are used to providing EMS care or to participating actively in the medical response.

Most commonly, non-EMS firefighters may be employed for hazard suppression, victim extrication and movement, and to the extent their training allows, initial triage. They should set up an inviolate perimeter barrier around the hazard area; position equipment and personnel in a safe, upwind position; and observe scene organization.

Similarly, police should enforce secure boundaries established by firefighters and EMS and maintain the crowd at a safe distance. Their assistance with traffic

control and street closure may be necessary for the efficient ingress and egress of emergency vehicles.

Media Involvement

In some states, the press may have statutory right of access to a disaster site and cannot be denied access unless they interfere with ongoing rescue efforts, even if they jeopardize their own safety in the process (eg, California Penal Code, Section 409). The objectives of rescue workers and members of the press may sometimes seem at odds and lead to conflict during a disaster. However, it is usually in the broadest public interest to communicate timely, accurate information to the press.

As a general rule, the following points are worth observing:

1. Allow the press access to the disaster site, but advise them about areas and activities that are dangerous to them or that may interfere with ongoing rescue efforts or victims' treatment.
2. Actively provide the press with information that is as timely and as accurate as possible, and do so frequently. Appointing a press liaison or public relations officer is helpful.
3. Important information almost always involves the nature of the incident, number of victims, relative seriousness of injuries (eg, number of deaths), and location where the victims were taken. A source of information (eg, telephone hotline) for relatives of victims to call is an important public service.
4. Do not speculate about facts that are not known to you.

Air Medical Resources

Many communities and rural areas have access to air medical resources both for transport and for delivery of personnel and supplies. In remote areas, this may be the only form of disaster assistance. EMS helicopters may be utilized by designating a helicopter landing zone in a safe location upwind from the event. It should be distant enough that rotor noise and debris do not interfere with rescue activities, and it should be free of obstacles to landing and departing. In general, a relatively flat field (minimum of 100 feet square) with an unobstructed approach and departure path (into the wind) is ideal. An aircraft staging officer should be appointed who can coordinate arriving helicopters on a mutual radio frequency.

However, not all disasters are amenable to air medical assistance, and at times, helicopters can be a nuisance. During the Loma Prieta earthquake in 1989, many structures in the San Francisco marina area were

MULTICASUALTY INCIDENTS & DISASTERS / 53

thought to be unstable and susceptible to collapse from helicopter rotor vibrations. As a result, access to the overlying airspace was restricted.

Local Accessory Resources

Accessory resources may be needed in certain circumstances. For example, structural collapse may require heavy equipment such as bulldozers provided and operated by the city's department of public works; utility loss or live power wires may require the assistance of the local power company. The ICS is a useful organizational structure for managing these resources.

Mutual Aid

Mutual aid refers to assistance provided by local EMS and public safety agencies from neighboring communities or towns. It is intended to provide mutual back-up resources for common events that temporarily overwhelm local capabilities. Ideally, prearranged operating agreements are helpful, as is the installation of a common radio frequency for mutual communications. Requests for mutual aid are usually made rapidly at the dispatch center, although in some cases they may require authorization from a local authority, especially if an obligation for reimbursement occurs.

Special Considerations

A. HAZARDOUS MATERIALS

An incident involving a hazardous material (hazard) requires special management because a threat to the rescue workers exists that may create additional casualties from among the rescuers or because contamination may spread to other areas in the community.

1. Priorities—The priorities in hazard management are as follows:

- Identify, isolate, and contain the hazard to prevent spread of the contamination.
- Decontaminate victims.
- Protect rescue workers and EMS personnel, who should not approach or receive victims unless they are properly decontaminated, or the rescuers have appropriate protective gear, or the contamination is contained in a protective wrap around the victim.
- Provide advance warning to receiving hospitals so that appropriate protective measures may be taken.

2. Special training and equipment—Hazard incidents are best managed by a specially trained team of rescue workers who wear special protective clothing and, when necessary, a respirator or self-contained breathing