

apparatus (Table 4-2). The appropriate training can be obtained from a variety of sources, for example, the 200-hour course provided by FEMA's National Fire Academy. Hazmat team individuals are familiar with methods of identifying hazardous substances, the nature of the substances and their effects, methods of hazard scene management, methods of hazard suppression, methods of decontamination, and operation of protective gear.

3. **Specify scene organization.**—The hazmat scene differs from the typical multicasualty event scene in that the immediate hazard area (the hot zone) is isolated from entry by unprotected non-hazmat personnel (Figure 4-7). Hazmat team members in protective gear enter the hot zone and extricate the victims to an intermediate zone or area where victim decontamination occurs, performed by hazmat team members also in protective gear. Hazmat team members should use triage principles to identify victims with the most immediate medical problems and the heaviest amounts of contamination. Decontamination often can be accomplished by removing the victim's clothing and dousing the victim with copious quantities of water or another irrigant solution, taking care to prevent hypothermia and contain the effluent. Once decontaminated, victims are then transferred to awaiting EMS personnel, who perform triage and treatment as in a traditional multicasualty event.

Occasionally, victims with critical injuries require immediate lifesaving treatment before they can be decontaminated. As a result, it is helpful to include individuals in the hazmat team who have medical training (eg, paramedics), who are capable of performing triage of victims as they are extricated, and who can perform limited lifesaving care before or during decontamination efforts. If decontamination is impossible, then the contamination should be contained in an occlusive wrap and the patient transferred to EMS personnel with adequate notification of the remaining contamination hazard.

Table 4-2. Hazard exposure protective equipment.¹

Level	Description
D	Work uniform, safety shoes, hard hat, gloves, eye protection
C	Add chemical-resistant suit, respirator
B	Add self-contained breathing apparatus (SCBA)
A	Total encapsulation with SCBA

¹Source: Environmental Protection Agency.

B. DIFFUSELY DISTRIBUTED VICTIMS

Multicasualty events or disasters that produce victims dispersed over a large geographic area, rather than a localized event, pose a special challenge. The method of response differs in approach and method of coordination and depends on the extent to which central command, coordination, and communications remain functional.

1. **The dispatch center is intact and operational.**—If radio and telephone communications are functioning (eg, in a moderate earthquake or natural disaster), the number of incoming 9-1-1 calls may be markedly increased with patients distributed diffusely throughout the area. Steps in managing such an event are as follows:

- Obtain and deploy additional ambulance resources through reserve units, back-up arrangement, mutual aid, and the like.
- Increase capacity for tracking deployed units by assigning additional dispatchers, reassigning radio frequencies, and the like. It may be necessary to suspend telemetry transmission to decongest the airwaves and free the dispatchers from nonessential duties.
- Priority-rank incoming calls and notify callers of anticipated delays. It may be necessary to temporarily suspend response to routine service requests.

2. **The dispatch center or other elements of command and communications have been rendered ineffective.**—In this case, there is no effective means of tracking resources, tracking incoming calls, or dispatching ambulances, and again, a large number of victims are diffusely distributed in the area. This may occur with a major natural disaster and is the most difficult situation to manage. Steps in managing such an event are as follows:

- With loss of communications (or by declaration), centralized dispatch ceases and ambulances should disperse to pre-designated station assignments in each neighborhood or area (eg, fire stations, hospitals, schools) that are natural locations for victims to self-report or around which neighborhood-level rescue efforts would be centered. Preestablished cache supplies at these sites should be utilized.
- EMS ambulance crews should assist the local neighborhoods in organizing casualty collection, triage, and treatment areas to the extent possible. It may not be practical for EMS crews to transport victims if they are the sole resource in a

Figure 4-7. Hazmat scene organization diagram.

