

E. AMERICAN RED CROSS GUIDANCE

[An excerpt from *American Red Cross, Disaster Services Regulations and Procedures Mass Care – Preparedness and Operations ARC 3031 Apr. 1987*³]

Contents (abridged)

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X. PREPAREDNESS FOR RADIOLOGICAL EMERGENCIES

In recent years significant emphasis has been placed on the need for off-site emergency planning around fixed nuclear facilities in the United States. Planning for radiological emergencies is required by law, supported by the Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission, and conducted by state and county governments and planning firms with which they may contract.

In radiological emergencies, the Red Cross role in support of state and county governments is limited to conducting mass shelter and mass feeding operations in government-designated facilities during evacuations. Consequently, many Red Cross chapters in states with currently licensed nuclear reactors are responsible for working with their local governments to make plans for mass care during such emergencies.

Administrative Regulations (ARC 3003) sets forth the basis for providing Red Cross services following radiological emergencies in which there is or may be company liability or insurance coverage or both. General guidelines relating to chapter preparedness for radiological emergencies are contained in *Chapter Preparedness and Disaster Operations* (ARC 3027). The purpose of this section is to provide chapters with specific details concerning Mass Care planning for these disasters.

³ Section X of ARC Procedure 3031 has been reformatted to more closely follow the format of this document and does not appear as originally submitted by the American Red Cross. The content has not been changed.

Planning Concepts

In the event of an accident at a fixed nuclear power reactor within the United States, the facility operator, the Nuclear Regulatory Commission, and the state government make an immediate assessment of the incident and ongoing evaluations of its potential outcome. They determine which of four emergency action levels the accident warrants. The four levels, beginning with the least serious, are unusual event, alert, site area emergency, and general emergency. These levels provide a standardized method of describing the seriousness of the accident and determining appropriate actions that government agencies and the Red Cross should take.

During a site area emergency or general emergency, steps may be taken to protect people living near the facility from potential or actual radiation release. Several possible protective actions may be taken. People may be “sheltered” inside their homes, offices, and other buildings if a release has already occurred or if a release is imminent but is expected to be of short duration. In this situation it is better to protect people by keeping them indoors-sheltered by the building from exposure-than risk their exposure while attempting to evacuate the area.

Another protective action involves the evacuation of people potentially threatened by a release. The Nuclear Regulatory Commission has determined evacuation areas to include a specific radius around each facility. This area is called the plume exposure pathway emergency planning zone (EPZ). Areas in which this EPZ is located are called “risk areas,” while those into which people would be evacuated are called “host areas.”

Chapters involved in radiological emergencies requiring evacuation would receive support from the national sector. However, chapters in designated “host” areas are responsible for preplanning mass care operations for radiological emergencies with the appropriate local government agency, and-at the very least-initiating these services if an accident should occur. Chapters that fall totally within risk areas have no responsibility for providing mass care in their jurisdiction, but they may be asked to assist in evacuating the elderly and hospitalized and residents of nursing homes. Volunteer and paid staff who reside or work within the EPZ would evacuate as directed by local officials during such an emergency.

Mass Shelters

Although Red Cross chapters are responsible for selecting facilities for mass shelters in other types of disasters, in radiological emergencies this responsibility falls to the host area government. In preparing a radiological emergency response plan, the responsible government agency is required to plan for a sufficient number of mass shelters within the host area to accommodate 50 percent of the population in the EPZ.

To support government efforts during radiological emergencies, the Red Cross may assume primary responsibility for operating mass shelters. Therefore, chapters need to actively participate in the planning activities of their local government, or of those firms responsible for planning, to ensure that designated mass shelter facilities meet Red Cross standards, that an emergency mass care facility survey is completed for each designated facility, and that written agreements are in place for the use of these facilities. Once all of the host area mass shelters

within the chapter jurisdiction have been designated, the chapter is responsible for ensuring that a sufficient number of personnel are trained as shelter managers, shelter workers, and health services workers and are available to initiate mass care operations in shelters. If it has sufficient resources, the chapter should also plan to continue operating the shelters.

The operation of shelters in radiological emergencies should not vary significantly from their operation in natural disasters. There may, however be certain special health concerns relating to these emergencies, such as potential exposure of evacuees to radiological release and the emotional impact of this threat on the shelter population. (See “Special Health Concerns” later in this section.)

Shelter managers, nurses, and other mass care personnel being prepared to respond to radiological emergencies must have a basic understanding of the effects and characteristics of these emergencies, since misconceptions may lead personnel to misunderstand their role and the potential effects of the accident. The training course Providing Red Cross Disaster Health Services in Radiation Accidents (see ARC 3076-R) and various local training programs are available to prepare mass care personnel.

In planning for mass shelters with the appropriate government agency, chapters should encourage the inclusion of certain instructions in written materials distributed to the public concerning response to radiological emergencies. The public should be advised in the event of evacuation to bring bedding, clothing, infant care items, and prescription medications with them to the shelter. They should also be advised as to pet care.

Reception Centers

Most response plans for radiological emergencies specify that reception centers or staging points be set up along evacuation routes. These facilities may –

- Provide radiological monitoring and decontamination of evacuees.
- Provide special information to evacuees.
- Direct evacuees to the proper mass shelter facilities.
- Register people who have left their homes. (This procedure may have subsequent legal implications relating to claims against the plant operator.)

The appropriate government agency is directly responsible for establishing and operating these centers. The Red Cross needs to assign a liaison worker to each of these facilities, however, to monitor and assist in controlling the flow of evacuees to mass shelters. It is important that this liaison worker be able to communicate with the chapter headquarters and mass shelter facilities. If necessary, this communication may be through use of the Red Cross or amateur radio system.

As part of their mass care preparedness planning, chapters in whose jurisdiction reception centers have been designated should appoint liaison personnel and assign communications equipment to the centers. Any other services the chapters may choose to provide at these centers should be arranged for only after all of the chapter’s mass care responsibilities at designated mass shelter facilities have been met. Refer to *Administrative Regulations* (ARC 3003) for information concerning company liability in radiological emergencies.

Voluntary Evacuations

During radiological emergencies it is likely that some people living near the nuclear facility will evacuate before an official recommendation to do so is given. Additionally, some people who live beyond the designated risk area will evacuate if evacuation is recommended. Although no one would be turned away from a mass shelter facility because they did not reside within the designated risk area, chapters must consult with the appropriate national sector office before establishing a mass care facility specifically for such groups.

If evacuees seek shelter from areas beyond those designated, host areas chapters should direct them back into the host area if feasible. Otherwise they should contact the appropriate national sector office. When a large number of evacuees are seeking shelter outside the designated host area, the chapter may establish mass shelters with the concurrence of the operations headquarters.

Special Health Concerns

The major health concern unique to radiological emergencies is that people may suffer radiation exposure and contamination. The appropriate government agency is responsible for radiological monitoring and decontamination. Red Cross involvement in these activities is limited to –

- Seeing that Red Cross volunteer and paid staff are monitored as necessary.
- Alerting the appropriate government agency when evacuees arriving at shelters have not been monitored or when evacuees show signs of illness that might be related to radiation exposure.

Plans for radiological emergencies usually specify that radiological monitoring and decontamination be done at reception centers or special staging points. This procedure is desirable because evacuees would then enter host areas and mass shelters without the possibility of contaminating others. However, monitoring and decontamination are sometimes planned for the same facilities specified as mass shelters. Chapters directly involved in government planning should advocate that monitoring and decontamination activities be located at reception or staging centers.

When these activities must occur at shelters, it is crucial that decontamination activities and evacuees who have not yet been monitored be strictly segregated from those who have been monitored. Procedures used to decontaminate evacuees may involve the removal and disposal of clothing. Chapters may not provide new clothing to evacuees without the approval of the operations headquarters. In their preparedness planning, chapters should seek to involve governmental and other voluntary organizations capable of providing used clothing as well as other needed supplies and service.

Attachment 5-A GUIDELINES FOR ESTABLISHING SHELTERS

In time of disaster, the Red Cross is responsible for providing temporary housing for persons who are unable to make their own arrangements. Disaster shelters are of two types: mass shelters and individual shelters. A mass shelter is a large facility used to provide temporary shelter for groups of disaster victims. An individual shelter is an arrangement whereby a family is temporarily housed in a hotel, apartment, or other rental unit at the expense of the Red Cross. Before setting up a mass shelter, a chapter should attempt to house families in individual shelters or with relatives, friends, or other persons offering space. Since a shelter provides only a temporary means of caring for people, plans should be made to close the shelter as quickly as possible. Families are best able to recover from the effects of a disaster when they are in their own living quarters.

The Shelter Committee

The chapter's shelter committee is responsible for organizing and operating shelters when they are required. The committee is responsible for identifying facilities to be used, designating space within the shelter for specific uses, and acquiring the necessary supplies and equipment.

Predisaster Planning

For shelters to function effectively, chapters must plan for them before disaster strikes. The chapter's written disaster plan should include –

- Surveys of buildings suitable for use as shelters, along with written confirmation of their availability. Agreements with building owners and managers should specify how the building will be maintained and who will pay for utilities and repair of damage.
- A list of equipment that the Red Cross is permitted to use in each building identified as a potential shelter.
- Other supplies and equipment that will be needed and how they can be obtained.
- A plan for training volunteers to operate the shelter.

All parties involved should have written copies of building surveys and agreements.

Potential Problems

In planning for shelters, chapters need to be aware of potential problems that may arise in their operation:

- Sanitation problems may develop if facilities are inadequate for the number of persons being housed.
- Victims may exhibit behavioral problems because of stress.
- Costs of operating the shelter are likely to be significant.
- Some families may be slow in making plans to leave the shelter.

Shelter Requirements

To be effective as a shelter, a facility should –

- Be located reasonably near victims' homes.
- Be safe and healthful.
- Have an adequate supply of drinking water.
- Have adequate toilet and bathing facilities.
- Have facilities for cooking, serving, and storing food.
- Be accessible to public transportation.
- Have adequate fire and police protection.

Services Provided at the Shelter

Every shelter must have Red Cross shelter management coverage on a 24-hour basis. The Red Cross provides shelter occupants with the following services:

- Full meals and afternoon snacks if facilities in the shelter are inadequate, food is prepared and served elsewhere.
- Individual assistance and counseling. The Red Cross provides occupants with help in solving disaster-related problems such as the need for transportation and permanent housing.
- Emergency medical services. Nursing services are available at all times, and shelter occupants are referred to a physician as required.
- A specific area for sleeping. Occupants are provided with cots and blankets.
- Recreation services. Activities are provided to relieve tensions and improve morale of occupants of all ages. Appropriate recreation activities include movies, television, games, and crafts.

Services in support of the shelter effort include scheduling of staff, record keeping; purchase, storage, and maintenance of supplies; and enforcement of safety, fire, and sanitation regulations.

Allocation of Space

The shelter manager is responsible for allocating space in the facility for the following purposes:

- Registration of shelter occupants
- Family assistance
- Shelter manager's office
- Nurse's office
- Sleeping accommodations with family units together (40 to 60 square feet per bed)
- Food service area
- Restrooms and bathing facilities
- Storage area for occupants' possessions
- Nursery

Shelter Registration

A *Disaster Shelter Registration* form (Form 5972) should be completed for each family registering at the shelter. If copies of these forms are not immediately available, the following information on each family should be recorded on an index card:

- The last, first, and middle names of the head of household and spouse, and the wife's maiden name.
- Names and ages of all family members.
- Any health problems of family members.
- The family's pre-disaster address.
- The date the family arrived at the shelter.

When a family leaves the shelter, the following information should be recorded:

- The date the family departs.
- Their post-disaster address.

Essential Shelter Needs

Equipment needed in a shelter includes cots and blankets, chairs, tables, drinking cups, hot plates for warming baby formula, brooms, trash cans, loudspeakers, Red Cross flags, emergency equipment such as candles, lanterns, flashlights, and generators, and a telephone. Shelter supplies needed include soap, towels, toilet tissue, disposable diapers, and cleaning items such as detergent and soap. Office supplies needed include a telephone, carbon paper, disaster forms, cards, file folders, paper, paper clips, and pencils. For a more complete list of items that should be prepacked in a shelter manager's kit, see Attachment 4.

Staffing the Shelter

The shelter committee is responsible for assigning volunteers to operate the shelter. The number of volunteers needed depends on the number of occupants per shelter. Shelter staff in addition to the shelter manager and medical staff may include Family Service workers, feeding staff, a storekeeper, and maintenance staff. The shelter manager has the following responsibilities:

- To initiate and maintain housing, feeding, health, and recreational services within the shelter.
- To inventory supplies and equipment before the shelter opens.
- To arrange for round-the-clock supervision of the shelter.
- To assign and schedule workers in the shelter.
- To maintain utility and janitorial services.
- To obtain, store, distribute, and safeguard shelter supplies and equipment.
- To maintain records of borrowed and purchased equipment, and to keep all receipts.
- To keep records of shelter activities and compile reports to be submitted to the chapter chairman or other responsible person.
- To coordinate all Red Cross activities in the shelter.
- To close the shelter. All borrowed property should be returned, and a receipt for their return should be secured. Buildings and grounds must be clean.
- To inventory supplies and equipment when the shelter closes.

Attachment 5-B GUIDE FOR SHELTER MANAGERS

Shelter Operation

This material is planned to serve as a guide and check list for the individual responsible for opening a school, public building, church, or other facility to be used for the reception and care of disaster victims.

The shelter manager should be someone familiar with the building to be used: its size, facilities, and day-to-day level of supplies. If the shelter is a school, the principal or a designated member of his staff may serve under agreements in effect between the school board and the Red Cross. Authorization for use of the school as a shelter should be made through normal school district channels.

The regular staff working in the building — faculty as well as office, cafeteria, and maintenance staffs — should be the primary resource for personnel to operate the shelter, as they have the most complete knowledge of the facility and can best safeguard against damage and misuse. The shelter manager may expect full support from the chapter to provide needed equipment, supplies, and additional staff. The Red Cross will pay for food and other supplies on hand that are used in the shelter as well as additional supplies required.

Mass care shelters are generally intended to operate for a limited time — one to four days. In most instances, shelter residents are able to return to their homes within a short time or to locate other housing. The remaining families can be assisted by Family Service workers in solving this problem.

While in operation, the shelter must meet a multitude of human needs both physical and psychological under adverse conditions. The young, old, ill, employed, and unemployed all have special needs to be met through recreation, medical services, transportation, maintenance, and social work services available through the shelter.

Duties of the Shelter Manager

Pre-Disaster Planning

Chapters are responsible for identifying and planning for shelters, and predesignated shelter managers should participate in this activity. Such preparedness comprises –

1. Developing a plan for the operation of the buildings to include:
 - A survey of the building.
 - A floor plan of the building and grounds, and use of space.
2. Estimating the resources and supplies necessary to operate the shelter based on its capacity:
 - Type and quantity of supplies such as soap, towels, and cleaning equipment.
 - Food and cooking equipment.
 - Provision for bedding and medical and first aid supplies.

3. Estimating additional staff needed for actual operations including support staff from other disaster committees.
4. Planning a method of registering each person housed in the shelter. (Last name first, pre-disaster home address.)

Note. The shelter manager may appoint one or more assistants for any of the above duties. However, they are all ultimately the responsibility of the shelter manager.

At a Time of Disaster

After being officially notified to open a building for the shelter, the shelter manager should:

1. Proceed immediately to the building.
2. Establish and maintain contact with Red Cross disaster headquarters.
3. Alert basic staff and activate the building.
4. Arrange the building for operation, and inventory supplies and equipment. Prepare rooms for receiving people and for other purposes.
5. Order supplies and equipment from Red Cross disaster headquarters and report any need for support such as medical services.
6. Recruit additional personnel. (Disaster victims in the shelter may be recruited.)
7. Begin feeding beverages and snacks as soon as the shelter opens, and begin regular meal service as soon as possible.
8. Keep in constant touch with the shelter chairman at disaster headquarters, giving progress reports and a daily count of persons housed and fed.
9. Arrange for the care of pets, if necessary.

Shelter Reception and Registration

The shelter manager is responsible for ensuring that a simple record is kept of every person who is housed in his shelter. He may delegate this responsibility to one or more assistants as needed.

At the reception desk, the family or individual should be assigned to an appropriate lodging area. They should proceed to the registration desk before going on to their lodging area.

Shelter registration cards (Form 5972) should be used if available. If not, plain 3x5 inch cards may be used for this registration. The following information is needed:

1. Last, first, and middle names for husband and wife (include wife's maiden name)
2. Names and ages of all family members
3. Any health problems
4. Pre-disaster address
5. Date arrived in the shelter; date departed
6. Post-disaster address

Registration cards should be made in duplicate. One copy is for the shelter manager's files, and one copy is sent to disaster headquarters for the Welfare Inquiry section. If it is not practicable to make cards in duplicate, an alphabetical list of shelter occupants can be submitted.

When victims move from the shelter, it should be so indicated on the registration cards, and disaster headquarters should be notified.

It is important that people be registered as soon as they arrive in the shelter, or as soon as practicable. (This is not to be confused with registration of families for individual assistance, i.e., Family Service.)

Food

In general, feeding for a shelter operation falls into one of two categories: (1) feeding within the shelter, where cafeteria facilities already exist, and (2) the arrangement to feed persons in a nearby commercial establishment. (In some instances, it may be feasible to create temporary kitchen and feeding equipment within the shelter.)

The shelter manager is administratively responsible for feeding people housed under his management. The shelter manager may have the use of staff that normally operate the cafeteria, or may have to rely on food delivery by other units of the Mass Care function.

The shelter manager is responsible for maintaining a daily count of people fed within his shelter and reporting this information to Red Cross headquarters.

The person in charge of feeding will arrange for someone to receive, store, issue, and keep records of supplies.

Shelter occupants can assist as cooks' helpers and servers, and can serve on the cleanup crew. Hot meals should be provided twice a day. Additionally, a midday lunch should be provided for children, the aged, expectant and nursing mothers, workmen, and disaster victims doing heavy work.

Special diet problems will be handled as recommended by medical and nursing staff on duty at the shelter.

Menus will be planned in terms of foods available, with perishable foods being used first. Sufficient food should be prepared to provide second servings. USDA foods may be available, subject to approval by appropriate government agencies (e.g., school administration) and Red Cross authorities.

Medical and Nursing

The Red Cross is responsible for providing adequate medical and nursing services in all Red Cross operated shelters to care for the sick and injured, protect the health of residents, and supervise the sanitation of the shelter.

The Red Cross chapter is responsible for providing competent Disaster Health Services staff in each shelter. If such staff is unavailable, the shelter manager should assign someone with knowledge of first aid to provide limited care. In the absence of qualified medical staff, all

medical problems should be referred to a local emergency room or physician. In such an event, the shelter manager must retain records of individuals — a description of their ailment or injury and the medical facility used.

Child Care

If a shelter remains open for more than a day or two, a child-care facility should be considered in order to ease the burden on parents. The shelter manager will designate someone to be responsible for childcare.

Recreation

If large numbers of persons are housed in the shelter, and if the shelter operation is prolonged, it is advisable to provide recreation facilities. It is the shelter manager's responsibility to decide when and if recreation is needed. He may appoint one or more persons to develop appropriate recreational activities.

The shelter manager may call upon resources at disaster headquarters for assistance in providing recreational supplies such as films, newspapers, equipment, games, and TV sets.

Shelter Maintenance

The shelter manager will designate someone to be responsible for building maintenance and upkeep. The staff normally responsible for the facility may be available for this purpose. Shelter residents should, however, be asked to assist. Necessary activities include the following:

1. Acquire additional supplies and equipment such as furniture, safety and cleaning equipment, and tools.
2. Arrange for daily janitorial service.
3. Arrange for the installation of additional temporary facilities such as showers and toilets.
4. Move furniture as necessary.
5. Prepare and supervise the use of the grounds and yard for parking and recreation, if necessary.
6. Maintain a system of record keeping to facilitate returning the building to its original condition upon closing, and document any damages and related expenses.

Floor Plan and Space Allocation

In the allocation of space, consideration should be given to the following needs:

- Manager's office
- Emergency medical care
- Feeding area
- Reception and registration
- Storage of food and supplies
- Possible storage of occupants' belongings
- Childcare

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- Rest room for staff (in larger shelters)
- Family Service interviewing area
- Recreation areas

Some guidelines to use in planning:

- 1 toilet per 40 persons (6 for 200, 14 for 500)
- 40 to 60 square feet of sleeping space per person
- 1 quart of drinking water (minimum) per person per day
- 5 gallons of water per person per day (all uses)
- 2,500 calories per person per day (approximately 3-1/2 pounds of unprepared food)

Staff Needed

- Shelter manager
- Assistant Manager
- Nurse
- Registration
- Food preparation
- Building maintenance and sanitation

TABLE 1 Staffing Requirements, Mass Care Facility

The following are suggested requirements for shelters operating on a 24-hour basis. Circumstances will dictate actual needs.

Title	200 Victims	500 Victims	1,000 Victims
Manager and assistants	3	3	3
Clerks and recorders*	1	1	2
Messengers and communicators	2	2	5
Security and safety*	2	2	4
Transportation coordinator*	1	1	1
Nurses (Red Cross)	3	4	5
Doctor (on call)	1	1	2
Ancillary (first aid)*	4	8	15
Clerical (nursing assistance)*	1	2	4
Cook	1	3	4
Cook assistants*	3	4	8
Kitchen helpers	4	12	24
Servers*	3	3	6
Building maintenance supervisor	1	1	1
Janitor*	2	2	2
Reception/registrar*	3	4	6
Dormitory supervisor	1	2	3
Interviewers (assistance)	5	11	21
Records and report*	1	2	4
Supply/storekeeper	1	1	2
Recreation (babysitters)*	3	4	9
Total	46	73	131

*In most instances, 85 percent of the work should be done by shelter residents.

