OVERVIEW

Providing shelter for vulnerable and special needs populations during and after an emergency is one of the most difficult challenges emergency planners face when preparing for a disaster. Certain people, such as the elderly, children, the disabled, and those with cognitive or sensory impairments or other special medical needs, may need special attention when staying in shelters. Their needs may go well beyond what is typically included in shelters.

The provision of shelter and housing for disaster victims falls along a continuum from pre-disaster emergency sheltering to permanent re-housing. The four categories that are usually arrayed along this continuum include emergency shelters, temporary shelters, temporary housing, and permanent, or replacement, housing. Each of these shelter types is described briefly below and in detail in this document.

Emergency Shelters
These facilities are intended to provide structurally-sound havens for very short periods of time, usually less than twenty-four hours. Emergency shelters typically include schools, churches, and government buildings. Sometimes, however, people cannot safely reach an emergency shelter, or the shelter may not have the facilities and services they need. In those instances, people will need to seek shelter wherever they are when the disaster occurs, such as in their home, place of employment, or other location.

Temporary Shelters
These shelters provide facilities for individuals and families whose homes are without utilities or were damaged to the extent that they are no longer habitable. These temporary living arrangements—which may occur in a school, hotel or trailer—usually exist for several days to several weeks, depending on how long it takes to make needed repairs to victim’s homes or to find alternative living arrangements.

Temporary Housing
An intermediate stage of housing is necessary for disaster victims who cannot return to their damaged homes, but need to find interim housing so that they may return to their normal routines. Temporary housing usually consists of apartments, rental homes, trailers, or other options that evacuees use for several weeks to several years until their homes are repaired or rebuilt.

Permanent Housing
Replacement housing is necessary when victims will never be able to return to their original homes because the homes have been damaged beyond repair and rebuilding is cost prohibitive, the homes have been condemned, or local regulations prohibit rebuilding. In some cases, owners of the victims’ rental properties may decide not to rebuild or to replace units or buildings damaged or destroyed by a disaster, leaving renters to find housing elsewhere.

RELATED TOPICS:
Evacuation
Temporary Housing
Children
Pets
WHEN DISASTER STRIKES – PROMISING PRACTICES

PREPAREDNESS

Individuals will have different needs and requirements for evacuation and sheltering during a disaster. Depending on the scale, duration, and severity of the disaster, as well as the number and types of people affected, it may be necessary to rely on one or all of the above shelter types during emergency operations. When planning for sheltering, it may be necessary to refine or modify one or all of the traditional sheltering types to fit local circumstances and the unique needs of vulnerable populations.

Take Hurricane Katrina, for example. Katrina resulted in the largest relocation of citizens within the United States since the Dust Bowl of the 1930s—an estimated 1.2 million people were forced to evacuate their homes and communities in the days before the storm’s landfall along the Gulf Coast on August 29, 2005.

The subsequent flooding of New Orleans resulted in the evacuation of an additional 100,000 to 120,000 residents who had remained in the city after the initial evacuation period, greatly increasing the strain on already-burdened shelter and housing resources. Inadequate prior planning led to an ad hoc sheltering strategy, and as countless successive shelters filled to and beyond capacity, conditions everywhere deteriorated rapidly, and tens of thousands of people suffered subhuman living conditions for weeks and even months. Two weeks after Hurricane Katrina made landfall, twenty-five states were providing shelter for evacuees; one month after the storm, evacuees were registered in every state and nearly half of the ZIP codes in the United States. Hurricane Katrina caused unprecedented financial, organizational, and social strain, and serves as a terrible reminder of the consequences of inadequate planning for evacuation and sheltering of vulnerable populations.

According to the National Response Plan, which was instituted by the Department of Homeland Security in 2004, agencies involved in emergency housing are responsible primarily for “the provision of short- and long-term housing needs of victims.” Unfortunately, the needs of vulnerable populations often are not taken into account when developing plans for evacuation and sheltering. Local governments and emergency planners should ensure that those with special needs or disabilities in their area are considered in every stage of the planning process.

Shelter Planning

Emergency shelters are refuges of last resort. They must be able to accommodate people of all sorts, including the elderly, families with small children, people who do not speak English, and people with special needs. In addition, shelters must provide a safe haven for all types of disasters, including hurricanes, tornadoes, earthquakes, ice storms, and heat waves. For instance, while a shelter may be sufficient to withstand high winds, it may be vulnerable to flooding.

Taking into account as many hazards as possible when planning the location of a shelter will help mitigate unforeseen risks and ensure the safety and well-being of disaster victims. Shelters may be needed for...
WHEN DISASTER STRIKES – PROMISING PRACTICES

vulnerable individuals during events that do not constitute emergencies for the general public, such as heat waves. Shelters should include provisions for such events.

Plans should be developed on how to staff, provision, and manage shelters when evacuees may exceed the shelter’s design capacity. Depending on the size of the area and the magnitude of the disaster, people needing shelter may far exceed expected numbers.

Because these facilities are generally only used for a brief period of time, they are often sparsely provisioned, uncomfortable spaces with few amenities. This can pose problems for people with special medical needs. For example, some people require refrigeration of medications or an alternate power supply to operate medical equipment. Accordingly, emergency shelters should have back-up generators and a way to keep medications refrigerated, such as a refrigerator or a cooler with ice. Moreover, they should be fully accessible, include accommodations for the visually and hearing impaired, and provide power and specialized equipment such as oxygen tanks. These shelters should be made available on a priority basis to people whose conditions require access to electricity and refrigeration.

Emergency planners should survey shelters for barriers to access for persons with disabilities. Before a particular school gymnasium is included in a sheltering plan, for example, it should be carefully examined to ensure that parking, pathways, and the restrooms serving the gymnasium are adequate to meet the needs of people staying at the shelter, including people with disabilities. If these barriers cannot be removed, consider another nearby facility for the community's sheltering needs.

Shelters should be run by the local jurisdiction or state and staffed by hospital employees, home healthcare staff, local healthcare providers, caregivers, and volunteers.

The Missouri Department of Health and Senior Services provides a useful checklist for managers of special needs shelters at: www.dhss.mo.gov/BT_Response/SNShelterManagerChecklist.doc

Some guidelines for creating and operating emergency shelters geared toward those who may need special assistance are listed below.

α Announce the location of shelters, particularly special needs shelters, well in advance of an event such as a hurricane or flood so that people know their location.

α Establish a confidential registry to identify individuals needing transportation assistance during a disaster. The registry could also be used to identify those who will need certain medications.

α Arrange shelters to be as simple and understandable as possible. Chaotic, disorganized shelters may be disorienting to the elderly or cognitively impaired; they may become confused by heightened activity levels or loud noises.
Shelter staff should be trained to work with people with low-English proficiency and people with disabilities, including those with guide or service animals.

α Ensure that service animals are not separated from their owners, even if pets are normally prohibited in shelters. More information on sheltering for animals can be found at The Department of Homeland Security website: 

Sheltering-in-place
Sheltering-in-place is necessary when conditions require that people seek protection in their home, place of employment, or wherever they are when a disaster occurs. Sheltering-in-place is a strategy often used in instantaneous onset events such as tornadoes, hazardous materials spills, and limited radiological releases. In such instances, people should stay where they are and take precautions to protect themselves by using safe spaces in their residences or businesses and limiting exposure to the hazard. The notion of sheltering-in-place assumes that people will be moved to safety quickly and not left exposed to the elements for long periods of time. Depending on the type of disaster, different shelter-in-place strategies will be required. Communities should develop a program to safely address different types of emergencies.

A few tips on encouraging or improving shelter-in-place plans are provided below:

α Provide information detailing shelter-in-place procedures for different types of emergencies to local businesses and residences. Encourage residents and local businesses to develop shelter-in-place plans. Businesses should perform exercises that require the use of shelter-in-place techniques. These are the best way to demonstrate expectations and to review the process with employees.

α Schedule and review drills throughout the year and provide feedback identifying strengths and weakness. Individuals that volunteer to perform key tasks during a drill or an actual event should be identified and trained at the onset of the program.

α Training of volunteer teams is crucial to the success of a shelter-in-place program. Teams must be comfortable with the process before a test is executed. More details on the shelter-in-place strategies and training mentioned above can be found at the ChicagoFirst website: 
www.chicagofirst.org/resources/shelter_in_place.pdf

RESPONSE
Managing shelters during an emergency presents a number of challenges for local emergency agencies. While planning ahead will help to minimize unforeseen problems, it cannot guarantee that the sheltering procedures will operate without a hitch during an actual emergency. During the disaster, it may be necessary to review and evaluate shelter operating procedures and to maintain a certain level of flexibility to deal with any unforeseen issues that may arise. Listed below are brief recommendations for managing shelters during an emergency. The recommendations were developed by the State of Arizona Vulnerable Populations Workgroup.

α Ensure that assistance is provided to people with special needs.
WHEN DISASTER STRIKES – PROMISING PRACTICES

- Provide support and respite for caregivers and shelter volunteers.

- Maintain shelter security for specific populations, such as women with protection orders, and children at risk from sexual predators. Provide continuous supervision of unaccompanied children and other individuals with special needs.

- Locate individuals with service animals close to a shelter exit.

- Allow individuals to stay in their vehicles in parking lots or areas near the shelter as necessary, and provide services in these areas for individuals who are unable to tolerate the environment of a mass shelter.

- Some persons with mental disorders (along with family members) may need to be placed in an area where they can receive enhanced services and support, or be monitored as necessary.

RECOVERY

One of the unique challenges in emergency planning is that shelter operations continue long after the disaster event itself has ended. In many cases, sheltering needs can last for weeks and months after a disaster, so it is critical that emergency planners take a comprehensive and long-term view of planning for post-disaster sheltering.

Temporary Shelters

Temporary shelters provide facilities for individuals and families whose homes were destroyed or damaged to the extent that they are no longer habitable. These temporary living arrangements usually exist for several days to several weeks, depending on how long it takes to find more normal living arrangements.

Temporary shelters should provide sleeping spaces for a few hundred people at a time, have adequate sanitation facilities, and be capable of providing and storing food. These shelters should generally be located indoors, such as school gymnasiums or auditoriums, but may be located outdoors if the weather is mild enough. Local governments should work with the Red Cross or other local emergency agency to identify and operate these facilities.

Each shelter should be equipped with interpreters as well as technologies such as TDD (telecommunications device for the deaf) communications and signaling devices, large print or cassette tapes for the visually impaired, and assistance for those with cognitive impairments or mental or emotional
Temporary shelters should provide for communication among shelters as soon as possible so people can begin to reestablish social networks. After Hurricane Katrina, social networks were disrupted to the extent that individuals waited for days, and often weeks, without knowing the fate of their family members. According to a 2005 survey conducted by The Washington Post, the Kaiser Family Foundation, and the Harvard School of Public Health, 42% of evacuees staying in shelters in Houston reported that they were still trying to find family or friends two weeks after the hurricane impact.3

Temporary Housing
Temporary housing is an intermediate stage between short-term shelter and permanent housing. For victims of a disaster who still cannot return to their damaged homes, temporary housing can provide a more suitable living environment and help return some sense of normalcy to their lives. Temporary housing includes apartments, rental homes, or motel rooms that evacuees can use for several weeks to several years until they can return to their repaired or rebuilt homes. The local emergency plan should identify physically accessible short-term housing (such as accessible hotel or motel rooms within the community or nearby) for people with disabilities who cannot return home because of extensive damage.

Disaster victims who were renters before the disaster may not require temporary housing if appropriate rental units are available to them on a permanent basis. For homeowners whose homes were damaged or destroyed by a disaster, rental properties may be used as temporary housing. When rental properties are not available in the disaster-impacted area, FEMA has frequently made mobile homes available as temporary housing, either situating a trailer on a property owner’s lot (seen as more desirable by property owners) or in mobile home parks that are in the vicinity of the damaged neighborhoods (seen as less acceptable from a community planning perspective, but acceptable since local residents can remain in or near the community).

Temporary housing for people with disabilities should be accessible. The housing should also have appropriate communication devices, such as teletypewriters, to ensure disabled and special needs individuals can communicate with family, friends, and medical professionals. For further information please see the promising practices module on temporary housing.

Permanent or Replacement Housing
Permanent or replacement housing may be necessary when disaster victims will never be able to return to their original homes.

Homeowners may be unable to rebuild their damaged homes, either because it is not financially feasible or because the local government has prohibited rebuilding in a hazard-prone area. In addition, in some cases, landlords may decide not to rebuild or replace damaged rental units, leaving renters to find housing elsewhere. If the vacancy rate in the disaster-affected area is low, disaster victims may consider permanently relocating to other cities or states. While the provision of replacement housing is not necessarily the responsibility of local governments or emergency agencies, there are a number of ways that emergency planners can help make the process run...
Repairing existing homes and finding new, replacement housing after a disaster can be difficult for disaster victims for a number of reasons. The loss of housing stock can create a shortage, resulting in steep increases in housing, supplies, and repairs. Conditions can be even worse if there are multiple disasters that have occurred in different parts of the country in the same time period. In addition to construction activities, residents often face delays in obtaining repair or reconstruction estimates from contractors or receiving a claim settlement from their insurer. All of these factors can be especially burdensome for low-income families, the elderly and mobility-impaired, people with special medical needs, and families with children.

Other Sheltering Considerations

Interagency Coordination
Ensuring that adequate sheltering will be available for vulnerable populations in an emergency requires extensive interagency planning and coordination. Coordinating resources to address the needs of special needs populations involves identifying stakeholders, agencies, non-governmental organizations, healthcare providers, and grassroots organizations.

Emergency plans should include agreements with neighboring cities or municipalities to provide sheltering during an emergency. By coordinating ahead of time with other local governments, evacuating people to shelters can occur more efficiently.

In addition, emergency plans should specify what agencies are responsible for coordinating volunteer agencies, evacuation transportation, and sheltering, as well as what agencies should work together to address broad issues. Planners should coordinate with local business owners who may be needed to provide temporary shelters for vulnerable populations during and after an emergency. These may include hotel or motel owners, landlords, campground or trailer park owners, and many others. Planners should also coordinate with churches, faith-based organizations, and schools to explore possible sheltering options.

Personal care attendants may be needed in shelters. Planners should contact local agencies that supply personal care attendants, such as independent living centers, and include them in the planning process.

The Connecticut State Office of Protection and Advocacy for Persons with Disabilities advocates the following interagency approach. Each municipality should establish a shelter enhancement team made up of the local Emergency Management Director, the local American Red Cross Chapter, and local advocacy groups or individuals who can speak to access-related issues. This group should develop a realistic plan for establishing universally accessible sheltering within their community, and should assess its facilities and develop strategies for making each facility more accessible. Local teams should then prioritize needed improvements and coordinate projects.
Community Education
As with all other aspects of emergency planning, successful planning for sheltering depends on making the community as informed and prepared as possible well in advance of an actual emergency.

Planning for sheltering should include strategies for public outreach and education, and should include specific methods for identifying and providing information to individuals or households with special needs. Emergency planners should take steps to ensure that community education strategies include all community members, regardless of age, race, ethnicity, or socio-economic status by:

- Routinely notify the public about the location of emergency shelters. This can be accomplished through a variety of means, including public meetings, brochures, radio and television ads, billboards, signs, and posters.

- Invite representatives of vulnerable populations or communities as part of routine shelter planning. Discuss with them which shelters they would be likely to use in the event of an emergency and what, if any, unique or special concerns they may have while staying at the shelter. Develop site-specific instructions for your volunteers and staff to address these concerns.

- Provide information to the community, including residents, local businesses, health care providers, and building owners of different shelter options, including strategies for sheltering-in-place.

- Practice evacuation and sheltering drills regularly to familiarize community members with the procedures. For more information on drills contact the New York City Office of Emergency Management, which conducts multi-agency field exercises to test the deployment of the city’s emergency supply stockpile and the setup of shelters.

ADDITIONAL RESOURCES
A Public Health Guide for Emergency Shelters in Missouri from the Missouri Department of Health and Senior Services Website: [www.dhss.mo.gov/BT_Response/EmergencyShelterGuide.pdf](http://www.dhss.mo.gov/BT_Response/EmergencyShelterGuide.pdf)

Numerous informative documents and plans relating to emergency shelters can be found on the Florida Division of Emergency Management Website: [http://www.floridadisaster.org/shelters/](http://www.floridadisaster.org/shelters/)

Further information on sheltering-in-place can be found at the Centers for Disease Control and Prevention (CDC) Website: [http://www.bt.cdc.gov/planning/shelteringfacts.asp](http://www.bt.cdc.gov/planning/shelteringfacts.asp)


Information, model plans, and other resources related to sheltering for animals can be found at: [http://www.ncagrgis.com/sheltering/](http://www.ncagrgis.com/sheltering/)

Checklist for emergency shelters. This publication, prepared by the U.S. Department of Justice, provides a checklist and guidance on meeting the requirements of the American’s with Disabilities Act: [http://www.ada.gov/pcatoolkit/chap7shelterchk.htm](http://www.ada.gov/pcatoolkit/chap7shelterchk.htm)
**Profile: Annual Safety Drills**

**Program:** Contra Costa County Annual Countywide Shelter-in-Place Drill

**Organization:** Contra Costa County Community Awareness and Emergency Response (CAER) Group, Inc.

**Keywords:** shelter-in-place, shelter in place drills, emergency preparedness

**Source:** [www.cococaer.org/prepare_plans_school.html](http://www.cococaer.org/prepare_plans_school.html)

**Brief Summary:** Contra Costa County Community Awareness and Emergency Response (CAER) Group, Inc. is a nonprofit public benefit corporation of public emergency response agencies, local government officials, and facilities and businesses that use, store, handle, produce, or transport hazardous materials.

Contra Costa County has one of the highest concentrations of chemical and petroleum plants on the West Coast. About half of the plants are close enough to population centers to make them serious threats to health and safety in the event of an emergency.

In order to help the community be prepared for a chemical-related emergency, CAER organizes annual shelter-in-place drills for schools and daycare centers throughout the county. While the event is voluntary, it is strongly encouraged through various creative forms of community outreach, and has seen very high rates of participation over its 7 years of existence.

Each year, CAER chooses one or more “Model School Sites,” which are schools that have sufficiently developed their shelter-in-place program to be a model for other schools. The annual shelter-in-place drills coincide with CAER’s testing of its Community Warning System (CWS), a system of sirens and radio alerts that alert the community and emergency responders when there is a hazardous materials incident or other type of emergency. CAER also provides extensive information on sheltering-in-place and other strategies for emergency preparedness and response on its website.

**Contact Information:**

Homepage: [http://www.cococaer.org/](http://www.cococaer.org/)

Executive Director: A. J. "Tony" Semenza

Email: ecccaer@pacbell.net

Telephone: 1-888-972-CAER (2237) or (925) 313-9296

Address: 1330 Arnold Drive, Suite 246, Martinez, CA 94553
A series of storms and floods in 1997 resulted in the evacuation of hundreds of people with special medical needs from communities in Alameda County, overwhelming medical resources available for shelters and placing these evacuees at great risk. As a result of these events, Alameda County EMS, along with other agencies, prepared a sheltering plan to manage the care and shelter needs of medically fragile persons in disasters.

The 45-page plan provides guidance to all entities with a role to play in the care and shelter of medically fragile persons before, during, and following a disaster, and outlines various strategies for sheltering people with different medical needs. The plan is an excellent example of a community recognizing the additional planning needed to adequately provide shelter for vulnerable populations during an emergency. The plan’s comprehensive format may serve as a model for other communities wishing to develop plans that address the needs of specific vulnerable populations.

Specific plan objectives include the following:

1. Define the roles and responsibilities of the primary agencies involved with the care and shelter of medically fragile persons during each phase of a disaster.
2. Identify the facilities to be activated as disaster shelters for medically fragile persons.
3. Identify the resources for operating emergency shelters for medically fragile persons.
4. Establish guidelines for the disaster response and the operations and staffing of emergency shelters for medically fragile persons.

Contact Information:
Alameda County Emergency Medical Services
Address: 1000 San Leandro Blvd. San Leandro, CA 94577
Telephone: (510) 618-2050 or 618-2099 (fax)
Website: www.acgov.org/PublicHealth/organization/divisions/ems/ems_disaster_planning.htm
### Profile: Sheltering Information Index

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<tr>
<td>Brief Summary:</td>
<td>This website is intended to provide persons with disabilities information on special needs registration by county.</td>
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This website provides a wealth of useful information on shelters and related topics. In order to ensure that the site is user-friendly for people using assistive technologies, the website has a simple design and avoids the use of complex navigation schemes and other techniques that could bar access. The site provides useful links and contact information for special needs registries in every Florida County, as well as useful links for other emergency and sheltering topics, such as a checklist for emergency shelters to ensure that they are fully accessible: [http://floridadisaster.org/documents/ADA/EmergencyShelterChecklistFlorida.pdf](http://floridadisaster.org/documents/ADA/EmergencyShelterChecklistFlorida.pdf)

The site is a good example of a statewide effort to utilize registries to plan for evacuation and sheltering of people with special needs. By providing simple access to registries as well as explanations for why they are important, the Florida Division of Emergency Management enables better emergency planning on a local level.

**Contact Information:**
Florida Division of Emergency Management
2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100
Telephone: (850) 413-9969
Website: [www.FloridaDisaster.org](http://www.FloridaDisaster.org)
REFERENCES


2 Ibid.
