

### OVERVIEW

According to the U.S. Census, there were over 70.6 million adults aged 55 or older in 2007.<sup>1</sup> As the baby boomer generation ages, this figure will continue to grow. The population of individuals aged 65 and older is projected to exceed 80 million by 2030.<sup>2</sup>

Older adults can be more vulnerable to disasters for a variety of reasons. Physical or mental impairments may make it difficult for them to care for themselves. Lack of transportation may be an issue: older adults might not own a vehicle, may lack access to a car, or may choose not to drive, impeding their ability to evacuate.<sup>3</sup>

Thirteen million people aged 50 or older in the U.S. say they will need help to evacuate. Some older adults may have difficulty voicing their needs if they become separated from their families or caregivers during a disaster.

If evacuated to a shelter, older adults may require a diet that is sensitive to their needs. In addition, they may benefit from a separate space at the shelter devoted to elderly. Staying in a shelter could reduce their access to adequate health care, including medications.



*An elderly woman is evacuated, New Orleans 2005.*

Source: Win Henderson/FEMA

In general, the special needs of the elderly are often overlooked in disaster planning. Hurricane Katrina highlighted the vulnerability of older adults in disasters. A study released in August 2008 found that of the 986 people who died as a result of Hurricane Katrina, nearly half were aged 75 or older.<sup>4</sup>

Many older adults were unable to evacuate and were left stranded in New Orleans without adequate food, shelter, or medical care. At least 68 elderly persons were found dead in their nursing homes, abandoned by their caretakers.<sup>5</sup>

Several steps can be taken to reduce vulnerability among older adults prior to a disaster, in shelters, and during the relief and recovery phases.

### REDUCING VULNERABILITY TO DISASTERS

The needs of older adults should be included in disaster planning. In developing emergency plans, local governments should seek input from elderly residents of the community, professionals such as gerontologists, and from long-term care facilities. Older adults should be well informed about preparing for disasters, including what to do during an [evacuation](#). A number of steps can be taken to help older adults prepare for a disaster, as summarized below.

## PREPAREDNESS

Inform older adults of important items to bring with them in the event of an evacuation, including medical records, a change of clothes, and medications. Older adults should make a list of medications and medical conditions to keep with them at all times. A variety of methods including microchips, bracelets, and bar codes, are being investigated to track medical histories and the special needs of the elderly.<sup>6</sup> Nursing homes and medical care facilities can partner to reduce the costs of implementing a tracking system. The goal is to provide accessible medical records regardless of elderly person's evacuation location.



*The Red Cross serves hot meals to flood victims in Horsham, Pennsylvania in 2001.*

*Source: Liz Roll for FEMA*

Local emergency managers should map areas of high vulnerability and identify older adults in those areas who may need special assistance in evacuation or during a disaster (see Florida program discussed in this section under Profiles).

Include long-term care facilities in the disaster planning process. These facilities, which house many older adults who require special assistance such as electric-powered respirators, are often privately owned and, unlike hospitals, may be overlooked in disaster planning. Many states do not include long-term facilities in their plans, greatly increasing elder adult vulnerability.

## RESPONSE

Staying in a [shelter](#) can be stressful, particularly for older adults who may need assistance in carrying out routine activities, such as bathing or getting dressed. These individuals may be reluctant to seek the help of strangers.

There are several measures that government agencies and nonprofit organizations can implement to accommodate the needs of older adults during disasters:

- α Make a separate space available for older adults in shelters. The older adult evacuees in Houston, for example, cornered off their own space in the Houston Astrodome, allowing more able older adults to care for and retrieve supplies for those who were less capable.
- α Provide medical care services, such as access to prescription medicines and doctors, as well as gerontologists, on site.



*Emergency responders giving a check up in Punta Gorda, Florida, in 2004.*

*Source: Andrea Booher for FEMA*

## WHEN DISASTER STRIKES – PROMISING PRACTICES

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- α Serve nutritious meals. Chronic conditions such as diabetes or high blood pressure require a diet lower in salt. According to Fran Brooks, Florida’s Emergency Coordinating Officer of Disaster Preparedness and Operations, “responders need to offer shelf-stable meals, not MREs that are formulated for military troops and first responders who need more calories.”<sup>7</sup>
- α Control access to shelters to help prevent people from preying on the elderly.
- α Post signs in shelters to help people navigate to desired locations.

### RECOVERY

All storm victims, especially older adults, want to return home and resume their normal daily activities as soon as possible after a disaster. However, older adults may have difficulty accessing services due to limited mobility, and are often targets of fraud. Several strategies can be adopted to address these issues.

Install smaller, localized food and service distribution centers in areas with a large number of elderly people. Florida terms such centers “pods” (as discussed in the Profiles later in this section). Pods create less stress compared to traditional distribution centers, which are often located in shopping center parking lots.

Conduct visits to the homes of older adults that lack mobility. Some communities have established a registry of older adults or people with special medical needs who may need extra assistance (such as delivery of meals, medications, or services) in an emergency. See the profile on Pitt County, North Carolina in the section on [special medical needs](#).

Given the fixed income of many older adults, additional and extended assistance from community organizations after the storm may be required.



*Hurricane Marilyn, 1995 – Disabled persons receiving assistance.*

Source: FEMA News Photo

### **ADDITIONAL RESOURCES**

Centers for Disease Control's Healthy Aging Program called Health Benefits ABCs.

AARP Public Policy Institute offers a breadth of literature on the subject.

The American Medical Association's document, Recommendations for Best Practices in the Management of Elderly Disaster Victims, may be useful.



### PROFILE: PROTECTING ELDERLY POPULATIONS

<b>Program:</b>	Florida Disaster Preparedness and Distribution Pods
<b>Organization:</b>	The State of Florida, Department of Elder Affairs
<b>Keywords:</b>	preparedness, response, tracking
<b>Source:</b>	CDC’s disaster Planning Goal: Protect Vulnerable Older Adults
<b>Brief Summary:</b>	Florida has a model protocol for elder care during disasters.

Florida serves as a model in preparing the elderly for disasters. For example, unlike most other states, Florida requires long-term care facilities to submit a disaster preparedness plan to the county. During a disaster, the Florida Department of Elder Affairs works with the state’s emergency operations center and maintains daily contact with area aging agencies to assess the needs of the elderly. One result of this communication was the use of a “pod” system to serve the elderly. Pods are temporary distribution centers that are set up in areas with high concentrations of older adults to provide food, water, and other supplies during a disaster. They specifically target adults who have limited mobility. Using U.S. Census data, Florida maps populations of older adults to target relief efforts. This reduces the stress on the elderly of waiting in long lines for assistance.

If a storm knocks out power, long-term care facilities are given priority in the restoration of power and the provision of services. Further, patients requiring dialysis, ventilators, or other electronic services are the first to be evacuated. The success of this is exemplified through Florida’s evacuation efforts in 2004. More than 10,000 nursing home residents were evacuated without a single death.



### PROFILE: PROTECTING OLDER ADULTS

<b>Organization:</b>	AARP Public Policy Institute
<b>Keywords:</b>	planning, evacuation, community responders, community partnerships
<b>Source:</b>	<i>We can do better: lessons learned for protecting older persons in disasters.</i>  <i>Summary:</i> <a href="http://www.aarp.org/research/assistance/lowincome/better.html">www.aarp.org/research/assistance/lowincome/better.html</a> <i>Full Report:</i> <a href="http://assets.aarp.org/rgcenter/il/better.pdf">assets.aarp.org/rgcenter/il/better.pdf</a>
<b>Brief Summary:</b>	The publication reviews conference highlights and addresses three major topics related to aging adults in preparedness and response efforts: planning and communications; identifying who will need help and what kind of help, including registries, tracking, and medications; and, evacuating older persons, including transportation and “special needs” shelters.

In 2005, AARP convened a group of over 100 government officials, emergency preparedness experts, and aging and disability advocates to share promising practices. The goal of the conference was to improve the treatment of aging adults in the community and nursing homes in the event of a disaster. This publication reviews the conference results and literature to address the challenges faced by older adults in disasters. There are several levels of responsibility in preparing for a disaster: individual, caregivers, local authorities, state agencies, and the federal government. All of these layers must coordinate to provide the best preparedness and response for vulnerable adult populations.

The conference addressed three major issues: 1) planning and communication, 2) identifying people at risk, and 3) Evacuation. Each of these is discussed briefly below.

#### **Planning and Communication**

- α Clarify who has authority among levels of government and agencies.
- α Develop partnerships among officials and responders prior to the storm.
- α Provide public information in a variety of forms accessible to older adults. Alternative formats for evacuation orders should also be issued, such as audio and visual broadcasts.
- α Educate older adults about having adequate supplies to shelter in place for three to six days. Use a combination of communication tools. Sheltering-in-place may include having back-up power for home dialysis and other special needs.
- α Train emergency responders in the special needs of older adults.

### **Identifying People at Risk**

- α Identify local adults who may have trouble evacuating. Include medical information for any individuals listed on a registry. Encourage the state to develop a “special needs registry” and encourage older adults to register.
- α Engaging the local community of older adults in developing individual emergency plans in consultation with emergency management officials.
- α Use assessment tools such as SWiFT (see Profiles) to quickly gauge the needs of older adults.
- α Prepare emergency responders to deal with medical issues faced by older adults such as Alzheimer’s disease and dementia.

### **Evacuation**

Older adults may face difficulty evacuating to a shelter or other safe location during a disaster. For example, many older adults do not drive or own a car. Before a disaster strikes, local governments should determine who will need transportation during an evacuation and develop a plan. This could include evacuating people from private homes, nursing homes, and hospitals. Planning for evacuation should address medical supplies and medication transportation and sheltering for people with special needs. Long-term care facilities should develop transportation plans.



### PROFILE: UNDERSTANDING OLDER ADULT NEEDS

<b>Program:</b>	SWiFT (Senior Without Families Triage)
<b>Organization:</b>	Baylor University, American Medical Association
<b>Keywords:</b>	triage, preparedness
<b>Source:</b>	Baylor College of Medicine, American Medical Association.
<b>Brief Summary:</b>	A triage system categorizes people as SWiFT 1, 2, or 3 during an emergency, based on severity of need. The system can also be used to classify older adults prior to an emergency.

Medical professionals from Baylor University developed this practice in the aftermath of Hurricane Katrina. Respondents realized that many elderly persons had been separated from their families and had no one to advocate on their behalf for proper medications and services. SWiFT began at the Houston Astrodome and subsequently spread to other shelters in the area. Initially, SWiFT was designed as a triage system, but it could be easily translated into a system that classifies older adults before the storm.

Levels of emergency need classification are simple: SWiFT Level 1, 2, and 3. SWiFT 1 is most severe and SWiFT 3 the least severe. Assessments are done in pairs, ideally with one nurse or doctor and one social worker. One assessor asks questions and takes the patient's vitals while the other records the information on a checklist. The information is recorded into a database so evacuees can be tracked.

**SWiFT Level 1:** Individuals are not capable of performing daily activities such as bathing, toileting, and remembering to take medicine. These persons should be placed immediately in a more suitable environment, such as a nursing home.

**SWiFT Level 2:** Individuals identified with impairments in instrumental activities of daily living that could not easily access benefits or manage money.

**SWiFT Level 3:** These individuals may need to be connected to family or they may have a problem that is easily remedied by the Red Cross or other volunteers.

The SWiFT program could be adopted on a state or national level so that all emergency response personnel have an idea of an older person's needs.



### PROFILE: CREATING A REGISTRY

<b>Program:</b>	Disaster Registry Program
<b>Organization:</b>	San Francisco Emergency Medical Services Agency
<b>Keywords:</b>	older adults, registry program
<b>Source:</b>	<a href="http://www.sanfranciscoems.org/index.php?cat=no&amp;name=drpForms&amp;exten=html">www.sanfranciscoems.org/index.php?cat=no&amp;name=drpForms&amp;exten=html</a>
<b>Brief Summary:</b>	Older adults and individuals with disabilities may pre-register with the local health department before an emergency.

Older adults and individuals with disabilities may pre-register with the Department of Public Health (DPH) Emergency Medical Services Agency (EMSA) of San Francisco. After an emergency occurs, the volunteer Neighborhood Emergency Response Teams (NERT) and other organizations involved in emergency response are organized to check on the registrants, address by address, when resources become available.

NERT is only able to provide basic first aid on-site. Deployment depends on the availability of volunteers. Registrants are strongly recommended to be self-sufficient for at least 72 hours (have food, water, and medications) assuming no public utilities are available.

The registry program helps local agencies identify the individuals who would be more vulnerable to emergency events and prioritize aid to serve them first.

### REFERENCES

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