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Continuing Education for Nursing Home Administrators

Executive Summary

Introduction

We cannot accurately predict which groups of people will be most affected by future emergencies. However, recent events have shown that some characteristics of older adults put them at greater risk of illness and death during many types of emergencies. For example, older adults may have impaired mobility, diminished sensory awareness, multiple chronic health conditions, and social and economic limitations—all of which can impair their ability to prepare for, respond to, and adapt during emergencies.[1] An emergency or disaster also can disrupt vital support systems that older adults rely on. For many older adults, independent living is made possible only with help from friends, family, and in-home services that provide meals, home-based health care, and help with the activities of daily living.

Events such as Hurricane Katrina in 2005 and the earthquake and tsunami in Japan in 2011 showed how vulnerable older adults can be during emergencies. Unfortunately, research conducted for this guide found three major limitations to our ability to plan for and protect older adults:

- Many different strategies are being used to identify vulnerable older adults across the country, but none of these strategies have been evaluated.
- No consensus exists on the best way to identify and protect older adults.
- Gaps exist in legal mandates to protect older adults.

This guide is intended to help close many of the gaps in emergency planning and preparedness for vulnerable older adults. In particular, it aims to give public health officials, the Aging Services Network, emergency management personnel, and essential partners from other sectors and at all jurisdictional levels (community, regional, tribal, and state) the critical information, strategies, and resources they need to improve the planning for and protection of vulnerable, community-dwelling older adults during all types of emergencies (often referred to as *all-hazards emergencies*).

Overarching Considerations

Several overarching considerations must be taken into account when planning for vulnerable older adults during emergencies. For example, planning officials should

- Include older adult issues and needs when developing preparedness plans. These plans should identify essential agencies, organizations, and other stakeholders.
- Identify and review relevant legal authorities.
- Define the different categories of emergencies and hazards to better understand how specific emergencies may affect older adults in the community.
- Use operational models of emergency management to identify the specific needs of older adults during each phase of an emergency.

Strategies and Options for Identifying Vulnerable Older Adults

To develop this guide, we conducted research, solicited input from a cross-sector work group of subject matter experts, and collected information during site visits in different parts of the country. We found that none of the methods currently being used to identify older adults who may need help in an emergency have been evaluated.

These methods are as follows:

- **Characterizing the population:** Basic epidemiologic data can be used to guide planning for the delivery of services, medications, durable medical equipment, and other materials needed to support older adults during all phases of an emergency.

- **Using geographic information systems (GIS):** GIS mapping technology allows officials to coordinate information about the locations of vulnerable older adult populations, community resources to help older adults, and potential hazards. Understanding where older adults are located and how they might be adversely affected by different types of emergencies can help local planners and first responders prepare for how they will meet the needs of older adults during an emergency.

- **Building, maintaining, and using registries:** Registries can be developed to provide information about specific types of help—such as medical equipment, transportation, or evacuation assistance—that vulnerable older adults will need during an emergency. They also can serve the broader purpose of identifying older adults who might need any type of help in an emergency.

- **Using shelter intake procedures to identify vulnerable older adults in the community:** This information can be used to identify older adults who may need special help.

Action Options

This guide outlines specific actions that can be taken at community, regional, tribal, state, and national levels to identify vulnerable older adults and plan for their needs during an emergency. These action options are organized into the following categories:

- Develop Plans.
- Collaborate with Partners.
- Collect and Use Data.
- Conduct Training and Exercises.
- Build, Maintain, and Use Registries.

- Use Law-Based Solutions.
- Prepare Older Adults and Caregivers.
- Shelter Older Adults.
- Take Action at the National Level.

Program Highlights and Resources

Throughout this guide, we will provide examples from states, communities, and existing programs that demonstrate practical options for addressing the gaps in preparedness planning. These examples will cover topics such as developing plans for rural areas, building community partnerships, leveraging the influence of area agencies on aging, and using technology to plan for older adults' needs. These examples also serve as models for action and highlight existing resources that might be helpful to professionals working with vulnerable older adults.

Moving Forward

CDC and its work group partners hope this guide can help those involved in emergency preparedness planning at all levels understand the unique needs of older adults. This publication is also intended to offer specific strategies and options for identifying and protecting vulnerable older adults during all-hazards emergencies.

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INTRODUCTION

We cannot accurately predict which groups of people will be most affected by future emergencies. However, events such as the 2005 hurricane season and the 2011 earthquake and tsunami in Japan have shown that some characteristics of older adults put them at greater risk of illness and death during many types of emergencies. For example, older adults may have impaired mobility, diminished sensory awareness, multiple chronic health conditions, and social and economic limitations—all of which can impair their ability to prepare for, respond to, and adapt during emergencies.[1]

Emergencies also can disrupt the support systems that many older adults rely on. For many older adults, independent living is made possible only with help from friends, family, and in-home services that provide meals, home-based health care, and help with chores and personal care needs. In fact, the majority (93%) of Medicare enrollees aged 65 years or older live in the community, rather than in nursing homes or other congregate settings. Nearly one-third of this group lives alone.[2]

In recent years, emergency preparedness officials have begun to recognize the need to address the special needs of older adults and other vulnerable populations. Landmark publications from

AARP and the American Medical Association, such as *We Can Do Better*[1] and *Recommendations for Best Practices in the Management of Elderly Disaster Victims*,[3] highlighted the devastating effects of Hurricane Katrina on older adults and strengthened the groundwork for more focused attention on this population.

The guidance offered in this publication was developed by a work group convened by the Centers for Disease Control and Prevention (CDC). (See Appendix A. How This Guide Was Developed.) It is intended to help close many of the gaps in emergency planning and preparedness for vulnerable older adults. In particular, this guide

seeks to give public health officials, the Aging Services Network, emergency management personnel, and essential partners from other sectors and at all jurisdictional levels (community, regional, tribal, and state) the critical information, strategies, and resources they need to improve the planning for and protection of vulnerable, community-dwelling older adults during all types of emergencies.

Although officials also need to plan for and protect residents of long-term-care facilities, this guide focuses on the protection of older adults who live in community settings. It also uses the term *all-hazards emergencies* to refer broadly to all types of emergencies.

This guide begins with descriptions of the older adult population and key definitions, followed by sections on overarching considerations and strategies for identifying vulnerable older adults. It concludes by presenting a set of potential action options that can be taken in advance to improve identification, planning, preparedness, and response efforts to protect vulnerable older adults during emergencies. The appendices include information on how this guide was developed and a glossary of terms used throughout the guide.

The Older Adult Population

The older adult population is not characterized by age alone. Different laws use different parameters to define this population, especially in terms of when people become eligible for services. For example, although adults are generally eligible for Medicare coverage at age 65, they also become eligible for services and protections at age 60 under the Older Americans Act (OAA).[4] The services provided under the OAA include many types of assistance—such as meals, home health services, personal care, and transportation—that help older adults continue to live in their communities. For this guide, we define older adult as those aged 60 years or older. Another factor that influences whether older adults need help during an emergency is whether they live in a long-term-care facility or in a community setting. Community-dwelling older adults may pose more complex challenges for planning officials than those in long-term-care settings because these facilities may already be governed by specific regulations. To remain in their homes, many community-dwelling adults rely on care from family members or caregivers or from services provided by area agencies on aging, community organizations, or home health agencies.

Interruption of these services during an emergency can compromise the self-reliance and independence of community-dwelling older adults. For these reasons, this guide focuses on the protection of older adults who live in their homes in the community.

Older adults are a diverse group in terms of their physical and mental health, and vulnerability cannot be characterized by age alone. Complex variations in the health status, living environments, and social situations of older adults also make it hard to protect this population during emergencies. For example, an independent older adult who lives on the 18th floor of a high-rise building may suddenly become vulnerable if the electricity goes out

Using Population Profiles: Florida

The Florida Department of Health developed a low-tech, low-cost data collection tool that has proven useful for emergency planning in counties and communities. For each county, the state provides a description of the population, including information on age, disability status, residency status (e.g., older adults who live alone), food stamp receipt, and dialysis use.

This information can help counties identify the specific needs of older adults and other vulnerable populations in an emergency. State officials collect data at the county and zip code level from human service agencies and other sources, such as the U.S. Census Bureau and the End-Stage Renal Disease Network. Data are given to counties in a spreadsheet that can be easily shared and accessed during emergencies.

during a hurricane, shutting down the building's elevators. Older adults are at increased risk of disease and death during emergencies because of factors such as the following:

- A higher prevalence of chronic conditions, physical disability, cognitive impairment, and other functional limitations.
- Dependence on support systems for medical care, medication, food, and other essential needs.
- Potential limitations in their mobility, their access to transportation, or other aspects of functional autonomy.[1,3]

In addition to the direct relationship between age and the prevalence of chronic conditions,[5] nearly 82% of Medicare beneficiaries have at least one chronic condition, and 64% have multiple conditions.[6] The treatment of these conditions may require daily medications, specialized equipment, or care coordination.[7]

If older adults are not able to get the medications, equipment, or special care they need, they can be at increased risk of complications and death during an emergency.

Definitions

Efforts to protect older adults can be complicated by debates about the sensitivity and accuracy of methods used to define the population in need. A variety of terms have been used to define populations considered to be "vulnerable" or in need of special attention in an emergency. These challenges reflect the need for terms that are specific enough to include people who need special attention, but inclusive enough to encourage the members of this population to participate in the planning process.

Making Communities Stronger: AARP and New Orleans

One way to improve emergency response and recovery efforts is to build strong communities. After Hurricane Katrina in 2005, staff in the AARP office in Louisiana and residents in the Hollygrove neighborhood of New Orleans came together to finds ways to make sure the needs of older adults are met in an emergency. Their goal was to increase connections between people, stabilize community groups, and help local residents build their leadership and problem-solving skills.

Local groups Trinity Christian Community, the Carrollton-Hollygrove Community Development Corporation (CHCDC), and Hollygrove Neighbors helped residents rebuild their homes and lives after Hurricane Katrina. In 2007, AARP staff and eight Hollygrove community leaders began working together to improve the neighborhood and local partnerships.

Training Local Leaders
Their first project was to create the Livable Communities Academy (cosponsored by AARP and the Louisiana State University Agricultural Center). Twenty-seven residents met for 8 weeks to learn about community issues, develop priorities for recovery, and learn new leadership and advocacy skills. After 8 weeks, residents set the following priorities: public safety and resident engagement, economic development, health and caregiving, and mobility and transportation. They continued to meet monthly to find ways to get other residents involved and to address the issues identified.

The partnership between Hollygrove residents and AARP Louisiana has since received funding from the AARP Foundation and the Harrah's Foundation. This funding pays for technical, research, and evaluation support and helps the group build organizational capacity.

Preparing for Emergencies
Trinity Christian Community and the CHCDC also developed a block captain program and an emergency preparedness and response guide for residents. Forty-five residents were chosen to be block captains and learn how to answer questions about disaster recovery and evacuation. Block captains received manuals with information about services such as the Supplemental Nutrition Assistance Program and service providers such as the American Red Cross and FEMA. The manual also has guidance on how to choose a contractor and how much repairs should cost.

Block captains identify people who need help during evacuations, and they help residents keep track of their medications, financial papers, and family contact information during an emergency.

Although no consensus has been reached on the most appropriate and useful terminology, this section describes several terms that are common in emergency preparedness planning.

Vulnerable Populations

Vulnerable populations are defined by one expert group as follows: "People who cannot comfortably or safely access and use the standard resources offered in disaster preparedness, relief and recovery. They may include people with sensory impairments (blind, deaf, hard-of-hearing); cognitive disorders; mobility limitations; limited English comprehension or non-English speaking; as well as people who are geographically or culturally isolated, medically or chemically dependent, or homeless."[8]

Although no universally accepted term exists to define specific vulnerable populations, this guide uses the term "vulnerable older adults" to describe older adults who may need additional help during an emergency.

At-Risk Populations

At-risk populations were defined by a pandemic planning advisory panel to the Association of State and Territorial Health Officials as follows: "Those people most at risk of severe consequences from the pandemic, including societal, economic, and health-related effects."[9]

They are defined by the Office of the Assistant Secretary for Preparedness and Response as follows: "Some individuals may have greater difficulty accessing the public health and medical services they require following a disaster or emergency. At-risk individuals have needs in one or more of the following functional areas: communication, medical care, maintaining independence, supervision, and transportation."[10] The functional areas cited in this definition are commonly known by the acronym CMIST.

Communicating with Older Adults in an Emergency

To be able to take action in an emergency, people need information they can understand. Officials who work in emergency planning must be aware of the needs and limitations of diverse populations, including older adults. [11] Age-related limitations such as cognitive, hearing, and vision impairments can make it hard for some older adults to get and understand health messages or emergency information. [12] A person's cultural background, language, and literacy level can also affect his or her ability to get, understand, and act on information in an emergency at any age.

When you create health or emergency messages or instructions, keep in mind the needs of special populations such as older adults, people with sensory impairments, and people with limited English proficiency. At CDC's Health Literacy Web site, you can find practical information, resources, and tools on how to develop materials for older adults (see www.cdc.gov/healthliteracy/DevelopMaterials/Audiences/OlderAdults/index.html). [13]

Special Needs Populations

The National Response Framework defines *special needs populations* as follows: "Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged."[14]

People Requiring Additional Assistance

This term is used by the Massachusetts Task Force on Emergency Preparedness and People Requiring Additional Assistance.[15]

Functional Needs Support Services (FNSS)

The Federal Emergency Management Agency's (FEMA's) *Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters* uses a functional needs framework to determine which individuals might need help in an emergency. FNSS are defined as services that enable individuals to maintain their independence in a general population shelter. They include the following:

- Reasonable modification to policies, practices, and procedures.
- Durable medical equipment.
- Consumable medical supplies.
- Personal assistance services.
- Other goods and services as needed.[16]

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OVERARCHING CONSIDERATIONS

Every jurisdiction (community, regional, tribal, state, and national) faces different challenges in preparing for and protecting vulnerable older adults in an emergency. Many different factors must be considered, including the existence (or lack) of relevant legal authorities, the type of emergency most likely to happen, and whether the jurisdiction is primarily urban or rural. Other relevant factors include the jurisdiction's demographics, geography, and specific environmental considerations.

Despite the local nature of many emergencies, events such as Hurricane Katrina and the terrorist attacks of September 2001 showed that planning and response requirements for major emergencies must go beyond the local level because additional help is often needed from state and federal agencies. This section outlines key overarching considerations identified during the development of this guide. These considerations may help officials at all levels plan and implement measures to protect vulnerable older adults during emergencies.

For example, planning officials should

- Include older adult issues and needs when developing preparedness plans. These plans should identify essential agencies, organizations, and other stakeholders.
- Identify and review relevant legal authorities.
- Define the different categories of emergencies and hazards to better understand how specific emergencies may affect older adults in the community.
- Use operational models of emergency management to identify the specific needs of older adults during each phase of an emergency.

Developing Plans

Comprehensive, all-hazards emergency preparedness requires the development and maintenance of emergency operations plans (EOPs) that address the needs of vulnerable older adults. The planning process helps encourage key organizations and entities to establish and maintain relationships essential for community, regional, tribal, and state jurisdictions to effectively respond to emergencies.

Cross-Sector Collaboration

Cross-sector collaboration between all key partners across jurisdictions is a vital part of preparedness planning. Planning for special needs populations, including older adults, may also benefit from including community members who represent special needs populations. Basic cross-sector activities should include the following: identifying vulnerable older adults and other populations with special needs before an emergency occurs, developing plans for risk communication, providing

shelter, ensuring continuity of medical care, transporting these groups to shelter and safety, and reintegrating displaced older adults back into their communities.

Essential Partners

Agencies and organizations from a variety of levels will be key in the planning process. These groups may include government entities, Aging Services Network agencies (which may or may not be governmental), and community partners.

Government Entities

Government agencies at all levels are critical partners in emergency planning and response and may include the following:

- Federal agencies.
- U.S. Department of Health and Human Services (HHS) agencies, including CDC, the Administration on Aging, the Centers for Medicare & Medicaid Services, the Office of the Assistant Secretary for Preparedness and Response,

OLD CITY HALL

the Indian Health Service, the Food and Drug Administration, and the Health Resources and Services Administration.
- U.S. Department of Homeland Security agencies, including FEMA and the Customs and Border Patrol.
- State agencies.
- State Attorneys General.
- Medicaid programs.
- State civil defense.
- State departments of behavioral health.
- State departments of public health.
- State emergency management agencies.
- State units on aging.

- Regional agencies.
- Metropolitan Transportation Authorities.
- Regional governing councils.
- Regional planning commissions.
- Local agencies.
- Aging services providers.
- Area agencies on aging.
- Fire departments.
- Hospital associations.
- Law enforcement agencies.
- Local health departments.
- Local emergency management offices.
- Long-term-care associations.
- Tribal organizations.
- Bureau of Indian Affairs.
- Local councils.
- Tribal governments.

Ensuring Workforce Competence: Hawaii

Partners from many different sectors share responsibility for identifying and protecting vulnerable older adults in emergencies. Each group has its own training requirements, which may or may not include information about older adults. All emergency responders should have a basic understanding of the unique needs of this population in order to plan and care for them in an emergency.

The State of Hawaii is a leader in this area. In 2005, the U.S. Department of Health and Human Services funded the Pacific Emergency Management, Preparedness, and Response Information Network and Training Services (Pacific EMPRINTS) to provide continuing education programs for emergency medical personnel and community health providers. [17] In 2009, funding was continued by the U.S. Department of Homeland Security.

Pacific EMPRINTS works to help health professionals

- Recognize terroristic and other emergencies.
- Meet the acute care needs of the population, including vulnerable populations.
- Participate in coordinated, multidisciplinary responses to emergencies.
- Rapidly and effectively alert the public health system of an event at the community, state, or national level.

The Pacific EMPRINTS Web site offers free, online courses and tutorials, several of which address vulnerable populations. Health professionals who work with older adults in Hawaii also have been trained through the PREPARE program, thanks to a partnership with Mather LifeWays, a nonprofit organization based in Illinois (see http://matherlifeways.com/re_prepare.asp for more information).

Aging Services Network

The Aging Services Network, created under the authority of the Older Americans Act (OAA), is responsible for helping to maintain the dignity and welfare of older adults.[18] It is an essential partner in preparedness planning for vulnerable older adults. The Aging Services Network is made up of the Administration on Aging (AoA), 56 state units on aging (SUAs), 629 area agencies on aging (AAAs), 244 tribal organizations, 2 Native Hawaiian organizations, and the many organizations that provide services (e.g., home health care or meal delivery) to older adults.

AAAs may serve a city, county, region, or other planning and service area, and they may be governmental, nonprofit, or private organizations.[19] The OAA requires SUAs and AAAs to create preparedness plans that include information on how jurisdictions will coordinate services for older adults. The OAA does not specify how these requirements should be met.[20,21]

Community Partners

Community organizations are essential partners in identifying older adults and protecting them during all-hazards emergencies. Examples of community organizations that may be involved in emergency preparedness planning include the following:

- American Red Cross.
- Community Organizations Active in Disaster (COADs).
- Community services organizations such as Meals on Wheels.
- Faith-based organizations.
- Home health care and durable medical equipment providers.
- Legal Aid and other organizations that provide legal services to older adults.
- Nonprofit social service organizations.
- Private-sector companies and business.
- Voluntary Organizations Active in Disaster (VOADs).

Identifying and Reviewing Selected Legal Authorities

The federal legal framework for all-hazards emergency preparedness and response includes laws, regulations, and executive orders. This section provides a brief overview of some of the laws that may apply to older adults,

Leveraging the Influence of Area Agencies on Aging: Hawkeye Valley, Iowa

The Hawkeye Valley Area Agency on Aging (HVAAA) in Northeast Iowa has shown that it can maintain services to older adults in an emergency such as a blizzard, ice storm, or flood. When older adults call for services, staff members in the Aging and Disability Resource Center assess their situation—for example, whether they need help because of a disaster. They also help callers sign up for the county's Reverse 911 high-speed telephone system (if available in their area), which county and city officials use to send emergency messages.

After the initial phone assessment, HVAAA case managers meet with clients to develop personal emergency plans. They also get permission to release personal information as needed during emergencies. They meet with clients every 3 months to keep information up-to-date and identify other older adults who may need help.

Planning for Emergencies

To make sure that people have food if they are stuck at home during bad weather, the HVAAA gives frozen and shelf-stable meals to clients who receive home-delivered or congregate meals. When the weather is very bad, these meals are given out several times during the winter. To make sure that services can continue in an emergency, HVAAA officials developed a continuity of operations plan and identified staff members who can go into affected areas if needed.

Case managers and senior center coordinators also contact clients during emergencies or inclement weather to find out if their needs have changed. HVAAA staff members work with service providers and county emergency management offices to make sure clients get the help they need. The HVAAA also is involved in the county's COAD partnership and long-term recovery committees, and it is a member of the state's VOAD (the Iowa Disaster Human Resource Council).

In addition, the HVAAA offers regular training for health professionals on disaster and emergency response topics and a program for clients called Disaster Preparedness 101. This program includes handouts from the HVAAA, FEMA, the American Red Cross, and county COADs that case managers and senior center coordinators can give to home-bound clients.

To **find** your local AAA, visit http://eldercare.gov.

public health, and preparedness and response activities. Individual organizations and entities should consult their legal counsel for specific guidance on any legal issue that may arise in their jurisdiction.

Selected Federal Legal Authorities

Federalism is the relationship between individual states and the federal government whereby any power not expressly granted to the federal government is reserved to the states or to the people.[22] Among the powers specifically granted to the federal government in the U.S.

Constitution (Article 1, Section 8) are interstate commerce, national defense, and the power to tax and spend for the public welfare. Although federalism empowers government action at local, state, and federal levels, states have general police power during emergencies.[23]

The legal authorities that form the basic foundation for preparedness for all-hazards emergencies include the following: the Homeland Security Act of 2002; the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988; Homeland Security Presidential

Directives 5 and 8 (2003); FEMA's National Response Framework (2008); and the Pandemic and All-Hazards Preparedness Act (PAHPA) of 2006, which amended the Public Health Service (PHS) Act. Although many of these authorities address planning for special needs or at-risk populations, most do not use an all-hazards planning framework to address the specific planning and preparedness needs of vulnerable older adults. PAHPA's provisions, as codified under the PHS Act, do specifically reference older adults.

Pandemic and All-Hazards Preparedness Act (PAHPA) of 2006

The purpose of PAHPA is "to improve the Nation's public health and medical preparedness and response capabilities for emergencies, whether deliberate, accidental, or natural."[24] To that end, PAHPA identifies the Secretary of Health and Human Services as the lead federal official for public health emergency preparedness and response and creates the position of Assistant Secretary for Preparedness and Response.

The act also provides new authorities for development of countermeasures and establishes mechanisms and grants to continue strengthening the public health security infrastructure at state and local levels. Of particular relevance to this guide, the act permits the Secretary of Health and Human Services to require that entities receiving cooperative agreement awards describe how they will include SUAs in their public health emergency preparedness plans.

Building Community Collaborations in Massachusetts

The Franklin Regional Council of Governments (FRCOG) serves 26 towns in rural Franklin County in Western Massachusetts. In 2007, the National Association of County and City Health Officials funded the FRCOG to implement the Let's Make a Plan project, which is based on a Collaborating Agencies Responding to Disasters (CARD) program developed in Northern California (http://cardcanhelp.org).

The FRCOG hired a coordinator and created an advisory council of local service agencies, first responders, residents, and other interested parties. The goal of the project was to help local residents prepare for emergencies. The first step was to identify local needs. The FRCOG convened focus groups of county residents, including members of populations that might need help in an emergency (e.g., vulnerable older adults).

Focus group members reported that most people do not know how to prepare for emergencies. The FRCOG responded by developing a training program for residents, service agencies, and community groups (e.g., religious congregations, an Alzheimer's support group, community health workers, municipal housing employees).

The success of the project in Franklin County led officials in three nearby counties to apply for funding from the Western Massachusetts Homeland Security Council for similar projects. All four counties received funding from the council and created a regional collaborative to help residents with special needs prepare for emergencies. To improve emergency planning among local groups, the collaborative created a series of conferences for community-based organizations, service agencies, and first responders.

For more information and resources, visit www.naccho.org/topics/demonstration/disability/MA.cfm.

Older Americans Act (OAA)

As noted previously, the OAA created the AoA, which is responsible for advancing the concerns and interests of older adults and their caregivers through SUAs and local AAAs. The OAA and its amendments create several requirements of SUAs and AAAs that relate to preparedness planning for older adults (see Table 1).

Americans with Disabilities Act (ADA)

Older adults are not necessarily disabled because of their age. However, emergency preparedness officials should consider the requirements of the ADA when planning for older adults because many members of this population have disabilities such as impaired cognition or mobility. The ADA prohibits discrimination directed toward individuals on the basis of disability in employment, state and local government programs and services, public accommodations, commercial facilities, transportation, and telecommunications. The ADA also requires covered entities to make reasonable modifications to their policies and practices when necessary to accommodate the needs of individuals with disabilities.[25] The ADA does not include specific references to preparedness and response, but its provisions are applicable.[26] In addition, Executive Order 13347, signed by President George W. Bush on July 22, 2004, requires federal agencies to (1) address the needs of people with disabilities in their emergency preparedness plans and (2) help state, local, and tribal governments do the same. Executive Order 13347 also created the Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities and charged it with "ensuring that the Federal government appropriately supports safety and security for individuals with disabilities in situations involving disasters."[27]

Table 1. Selected Provisions of the Older Americans Act Related to Emergency Preparedness

Section No.	Description of Provision
Section 306(b)3	Permits area agencies on aging (AAAs) to make recommendations to government officials in the planning and service area and the state on the needs of older individuals with regard to emergency preparedness.
Section 306(a)	Requires that each AAA shall, in order to be approved by the state agency, prepare and develop an area plan for a planning and service area for a 2-, 3-, or 4-year period, as determined by the state agency.
Section 306(a)17	Requires the plans referenced in Section 306(a) to include information detailing how the AAA will coordinate activities and develop long-range emergency preparedness plans with local and state emergency response agencies, relief organizations, local and state governments, and any other institutions that have responsibility for disaster relief service delivery.
Section 307(a)	Requires that each state unit on aging (SUA) shall, in order to be eligible for grants from its allotment under this title for any fiscal year, submit to the Assistant Secretary a state plan, which under Section 307(a)29 is required to include information detailing how the state will coordinate activities and develop long-range emergency preparedness plans with AAAs, local emergency response agencies, relief organizations, local governments, state agencies responsible for emergency preparedness, and any other institutions that have responsibility for disaster relief service delivery.
Section 307(a)30	Require that the SUAs' plans include information describing the involvement of the head of the state agency in the development, revision, and implementation of emergency preparedness plans, including the state Public Health Emergency Preparedness and Response Plan.

Health Insurance Portability and Accountability Act

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule provides federal protections for personal health information held by covered entities and gives patients an array of rights with respect to that information. At the same time, the Privacy Rule is balanced so that it permits the disclosure of personal health information needed for patient care and other important purposes.[28] Because of uncertainty about how this rule should be applied during an emergency, service providers who work with the Aging Services Network and other social service organizations may have concerns about their liability if they share the names of older adults who need help.

In 2001, HHS released a guidance memo to the AoA that states that programs that operate under the OAA do not meet the criteria for a covered entity as a health plan. However, because they may meet the criteria for a health care provider and collect the type of individually identifiable health information covered under the OAA, they may be subject to the HIPAA Privacy Rule.[29]

State Legal Authorities

State public health, emergency management, and other public safety agencies are created and empowered under state laws. State legislatures enact laws, and administrative agencies promulgate regulations relevant to emergency preparedness and response and the protection of vulnerable populations.

These legal authorities may perform essential functions such as maintaining registries of people who need help during emergencies, setting up special needs shelters, and rewriting laws to allow greater flexibility for refilling prescriptions during emergencies.

Many states mandate certain considerations for people with special needs. However, our research suggests that most states do not have statutes or regulations that require jurisdictions to develop plans for protecting vulnerable older adults in all-hazards emergencies. An important exception to this finding is Florida.[30]

Using the Law to Protect Older Adults

Public health legal preparedness for emergencies and other public health priorities is defined as "the attainment by a public health system...of specified legal benchmarks or standards essential to the preparedness of that system." [31]

Its core elements include the need to

- Ensure the presence of effective legal authorities to carry out essential public health services.
- Establish and sustain the competencies of public health professionals to apply those laws.
- Provide for coordination of law-based efforts across jurisdictions and sectors.
- Develop and make accessible information about public health laws and best practices.

Government agencies at all levels can improve their legal preparedness for protecting vulnerable older adults by (1) identifying and assessing their jurisdiction's relevant legal authorities and (2) ensuring that key officials (e.g., health officers, emergency management directors) know how to apply legal authorities across jurisdictions and sectors.

Working Across Jurisdictions

Mutual aid agreements are important law-based tools that promote the sharing of emergency response resources across jurisdictions. [32] For example, in June 2008, when heavy rains in Iowa produced flooding that displaced or threatened large segments of the state's population, about 65,000 Iowans aged 60 years or older needed help. [33]

The state's area agencies on aging were overwhelmed and sought help from the national Administration on Aging. Officials there knew that subject matter experts in nursing, environmental health, and aging were available in Florida and could be deployed to Iowa through the Emergency Management Assistance Compact (EMAC).

This event underscored the need for public health, emergency management, and aging services officials to be aware of law-based agreements such as EMAC, which give states a simplified way to ask for and share expertise and resources. These agreements can also help states improve their legal preparedness for protecting vulnerable older adults during emergencies.

Authority to Develop Emergency Operations Plans (EOPs)

In general, states develop EOPs pursuant to their police power. Although federal law does not mandate that states develop EOPs, some federal laws and agencies (e.g., Sections 319C-1 and 319C-2 of the PHS Act) require that states create EOPs that comply with federal plans before they can receive funds for emergency preparedness. This requirement encourages greater coordination of response efforts across jurisdictions.

For more information about the federal legal framework, which generally directs and influences all-hazards emergency preparedness, and additional resources, visit the Web site of CDC's Public Health Law Program at www.cdc.gov/phlp.

Defining Categories of Emergencies and Hazards

Officials face different challenges in preparing for and responding to emergencies depending on the type of hazard. Different types of hazards also can affect older adults differently and require specific types of planning. For example, floods and other natural disasters that displace people from their homes and communities are likely to affect vulnerable older adults differently than contagious disease pandemics or major winter storms that isolate individuals and populations. An all-hazards approach to prepared-ness recognizes the full spectrum of hazards and potential events

and includes planning for the more common problems that can occur during an emergency.[34] Different organizations categorize emergencies and hazards in several different ways. FEMA, for example, uses more than 15 categories. (See www.fema.gov/hazard/index.shtm for more information.) Table 2 lists and briefly describes the major categories of emergencies and hazards. By understanding how different types of hazards affect older adults, emergency planners

Understanding the HIPAA Privacy Rule

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule seeks to protect individually identifiable health information from uses and disclosures that may unnecessarily compromise a person's privacy.[28] At the same time, the rule permits disclosure of protected health information without authorization from the individual for specific purposes, including for treatment and payment.

The Privacy Rule applies to health plans, health care clearinghouses, and any health care provider who transmits health information in electronic form in connection with transactions for which the Secretary of Health and Human Services has adopted standards under HIPAA (defined as "covered entities"). The Privacy Rule applies only to covered entities. Many organizations that use, collect, access, and disclose individually identifiable health information will not be covered entities and thus will not have to comply with the Privacy Rule.

Examples of covered entities include the following:

- Health plans, such as company health plans, government programs that pay for health care (e.g., Medicare, Medicaid, health care programs for military personnel and veterans), health insurance companies, and health maintenance organizations.
- Health care clearinghouses, including entities that process non-standard health information received from another entity into a standard format or vice versa.
- Health care providers, such as chiropractors, clinics, dentists, nursing homes, pharmacies, physicians, and psychologists.

The following types of agencies are not covered entities under the Privacy Rule if they do not meet the criteria as covered entities: social service agencies, centers for independent living, paratransit authorities, protection and advocacy organizations, and public agencies that perform public health activities. The terms discussed in this section (e.g., health plan, health care provider) are specifically defined in the HIPAA Privacy Rule. Local and state organizations should consult their legal counsel to determine if their operations meet the criteria for a covered entity.

If the President of the United States declares an emergency or disaster and the Secretary of Health and Human Services declares a public health emergency, the Secretary may waive sanctions and penalties against a covered hospital that does not comply with certain provisions of the HIPAA Privacy Rule. However, the Privacy Rule remains in effect, and waivers apply for limited periods only.

at community, regional, tribal, and state levels can improve their ability to protect vulnerable older adults.

Using Operational Models of Emergency Management

Emergencies can be classified into one of three phases of emergency management: (1) Preparedness, (2) Response and Operations, and (3) Recovery and Transition.[35] Each of these phases dictates specific functional and operational considerations, including planning, use of registries, transportation, and discharge. Although many of these considerations may be part of the preparedness phase, their relevance may increase depending on the circumstances and evolution of the hazard.

Table 3 illustrates the overlap of the domains of functional and operational considerations across the three phases of emergency management. This table was created during the course of developing this guide in order to provide a temporally phased framework for the functional and operational elements of emergency management.

These elements can help preparedness officials identify and plan for how to meet the specific needs of vulnerable older adults during each phase of an emergency.

Table 2. Categories of Emergencies and Hazards

Category	Description
Pandemic	A worldwide epidemic of a disease. For example, an influenza pandemic may occur when a new influenza virus appears for which the human population has no immunity.
Natural disaster and severe weather	Includes earthquakes, extreme heat or cold, floods, hurricanes, landslides, tornadoes, tsunamis, volcanoes, wild fires, and winter storms. Some emergencies may be further compounded by the emergence of associated ancillary hazards, such as communicable disease outbreaks.
Mass casualty events	May result from intentional actions (e.g., a terrorist attack) or may be unplanned (e.g., the derailment of a train with tanker cars carrying toxic chemicals). This type of emergency has the potential to overwhelm medical and emergency response personnel and resources.
Radiation emergency	May occur when radioactive material is released into the environment as the result of intentional actions or unintentional events. May result in contamination of food and water.
Chemical emergency	Occurs when a hazardous chemical that may represent a threat to human health has been released. Chemical releases can be the result of intentional actions or unintentional events.
Bioterrorism	The deliberate release of microbial agents (e.g., viruses, bacteria, toxins) for the purpose of causing illness or death in humans, animals, and plants.

Sources: U.S. Department of Health and Human Services, www.flu.gov/pandemic/about and CDC, http://emergency.cdc.gov/hazards-specific.asp.

Table 3. Functional and Operational Considerations Related to Protecting Vulnerable Older Adults Across the Three Phases of Emergency Management

Preparedness	Response and Operations	Recovery and Transition
Planning		
Competencies		
Registries		
Geographic Information Systems Mapping		
Communications and Messaging		
	Evacuation and Transportation	
	Sheltering and Mass Care	
Medication and Medical Needs		
		Discharge

3

# STRATEGIES AND OPTIONS FOR IDENTIFYING VULNERABLE OLDER ADULTS

Our ability to accurately identify which older adults are—or will become—vulnerable is limited and is a primary obstacle to helping those in need during an emergency. Planning efforts also can be hampered by a lack of understanding about how older adults will act in an emergency, which makes it harder to ensure that the right services and resources are available.

Although no best practices or tested approaches currently exist to identify vulnerable older adults before an emergency occurs, a variety of strategies are being used across the country. Many communities are working to assess the needs of their older adult residents and create plans to close gaps in preparedness.

Among the many potential approaches for identifying vulnerable populations for preparedness planning, our research identified four methods that are currently being used: characterizing the population; using geographic information systems (GIS); building, using, and maintaining registries; and using shelter intake procedures to identify vulnerable older adults in the community.

Characterizing the Population

Officials at all jurisdictional levels need to understand the basic epidemiologic characteristics of their older adult population to plan appropriately for this group. Epidemiologic data can be used to plan the delivery of services, medications, durable medical equipment, and other materials needed to support this population during all phases of an emergency. For example, data that indicate a high prevalence of diabetes
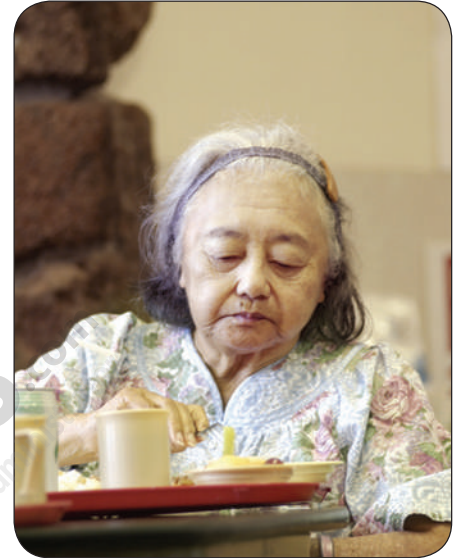
Preparing for Emergencies in Rural Areas

Franklin County is a large rural county in Western Massachusetts. Its population covers about 725 square miles in an area that is geographically isolated from the state's major urban centers. Like many rural communities, Franklin County faces challenges in preparing for emergencies (isolation from services, less funding, and fewer resources) that are different from those in urban or suburban areas.

But rural communities also have strengths that support emergency response and recovery in a disaster. Residents have a strong sense of community, but are also independent and self-reliant. They see their isolation and independence as a strength that will help them through hard times. Residents in isolated areas know that help from outside the community might not come for more than 72 hours, so they have to be prepared to take care of themselves and their neighbors.

To overcome the challenges of less funding and fewer people to respond to emergencies, officials in rural areas often serve in multiple roles. For example, in the town of Deerfield, elected members of the Board of Selectmen also serve as the Board of Health. The emergency coordinator for the Franklin Regional Council of Governments also volunteers as a public health nurse in her community.

among older adults in a particular community can lead to more comprehensive stockpiling and planning for distribution of insulin during an emergency. Categories of information that can help jurisdictions develop preparedness plans for older adults include

- Demographic characteristics, including the number of older adults and their age, sex, and race/ethnicity, as well as the size and types of cultural subgroups.
- Prevalence of chronic medical and behavioral health conditions, disabilities, and functional limitations.
- Prevalence of chronic conditions that require specific medications, durable medical equipment, or special medical care.
- Primary language and other languages spoken by significant portions of the population.
- The proportion of older adults who live in the community and the proportion who live in independent living, assisted living, or long-term-care facilities.
- Residency patterns, including proportions that are permanent, seasonal, or periodic.
- The proportion of older adult who receive services through organizations such as the Aging Services Network, social service agencies, or home health agencies and the proportion of community-dwelling adults who do not receive services from any organizations.

Potential sources for these data include the following:

- Aging Services Network client databases (aggregated).
- Behavioral Risk Factor Surveillance System (BRFSS).
- Community surveys.
- Disease registries.
- Hospital discharge databases.
- Medicaid and Medicare databases.
- State data centers.
- Pharmacy databases.
- U.S. Census.

Using Geographic Information Systems (GIS)

GIS is "a collection of science and technology tools used to manage geographic relationships and integrate information. GIS helps us analyze spatially-referenced data and make well-informed decisions based on the association between the data and the geography."[36] Although

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Creating and Sharing Databases

To protect vulnerable older adults in an emergency, AAAs must be able to manage client data and respond to public inquiries. To achieve this goal, Florida developed a state network of Aging Resource Centers (ARCs) within its 11 AAAs and a central Information and Referral database. Before this resource was created, each AAA had its own database and referred people to services through Elder Helplines in each county.

Officials in the Florida Department of Elder Affairs decided to create a central database to improve oversight and access to aging services. The Older Americans Act provided federal funding to support the project. Staff training was critical, and a work group with staff from each AAA/ARC was created to guide the transition to the new system. The group held weekly conference calls to set standards for collecting and reporting data and classifying resources. The group continues to meet monthly to ensure proper maintenance of the system.

Transferring Services in an Emergency
The new database allows helpline calls and confidential client records to be transferred from one AAA/ARC to another in an emergency. The agency on the receiving end can take calls from residents in the affected area, create new client files, update existing client records, and coordinate services. Transfers are usually requested by the AAA/ARC in the affected area, but if the situation is unexpected, an AAA/ARC in another area can activate the transfer. Staff members also can connect to the database through the Internet from another site if AAA/ARC offices are not accessible.

In 2008, the system was tested during a real emergency, Tropical Storm Fay. As the storm approached, calls and client records from Miami-Dade County were transferred to the AAA in St. Petersburg. When the storm threatened operations in St. Petersburg, calls and records were transferred to Tallahassee. Once the storm passed Miami-Dade County, the AAA there was able to resume handling its own calls, as well as those from Jacksonville, which was then under threat from the storm.

To protect client information, data are backed up and transferred to a storage server daily, then moved to another site each week; the data are stored at this site for at least 8 weeks. In addition, the database's servers are backed up to a secure location in South Carolina.

GIS technology can be applied to many areas of public health, its ability to simultaneously map the location of populations at risk, community resources, and potential hazards makes it extremely valuable to emergency preparedness planning for vulnerable populations.

In the response and operations phase of emergency management, GIS technology can be used in real time to create a map of a disaster or outbreak that can provide critical information to first responders, the media, and the public and promote better decision making.

In the recovery and transition phase, it can be used to identify population shifts that are due to migration, changes in topography

Using GIS Technology in Hawaii

Many communities have recognized the benefits of using GIS technology to create maps of local populations, potential hazards, and community resources. In Hawaii, the State Department of Health, State Civil Defense, and State Executive Office on Aging work with the Pacific Disaster Center (PDC) to make GIS mapping an integral part of their emergency planning efforts. The PDC is an applied science, information, and technology center that seeks to reduce the negative effects of disasters on people's lives and property. It is managed by the University of Hawaii and primarily serves the Pacific and Indian Oceans, Hawaii, Alaska, and other jurisdictions of the Pacific and Indian Ocean regions.

Through this partnership, planning officials in Hawaii created a   social vulnerability index that includes factors such as age, race, socioeconomic status, health status, gender, and housing type. This information is used to create a map that can be overlaid with information about facilities that serve older adults (e.g., adult day care centers, assisted living facilities, adult residential care homes) and potential hazards (e.g., flood zones, volcanoes). The result is an at-a-glance visual image of the locations of vulnerable populations in relation to hazards. Planning officials use this information to decide where shelters and education are most needed.

The PDC focuses on Hawaii and the Pacific Rim, but its Web site (www. pdc.org) has free tools that all states and communities can use to improve their mapping capabilities and prepare for all-hazards emergencies.

Evacuating and Transporting Vulnerable Older Adults

Evacuating and transporting vulnerable older adults in emergencies can be challenging for emergency planners. A 2005 AARP survey found that 15% of adults aged 50 years or older would not be able to evacuate their homes without help. Of this group, half would need help from someone outside their household. In addition, 25% of adults aged 75 years or older would need help.[1] Older adults are also more likely to not have access to a car, and many use medical equipment or assistive devices that are hard to transport.   [27] Even older adults with cars may need more time to prepare than younger adults because of difficulties driving in heavy traffic or medical conditions that make it unsafe for them to sit in traffic for long periods. [37]

Another challenge for emergency officials is that some people may not want to evacuate. Reasons include a distrust of government, fear of not returning home, previous experiences in shelters, and concerns about pets.[37,38] To overcome these challenges, emergency planners work with an array of partners and use a variety of strategies. These partners include city, county, and state departments of transportation and transit agencies, who can help to identify and transport residents in emergencies. Registries can be used to identify older adults who know in advance that they will need help.

Depending on the emergency, officials can use different types of evacuation methods.   Multi-tiered evacuations may be useful when officials know when a hazard (such as a hurricane) is likely to occur.   [39] Under this strategy, older adults are encouraged to evacuate before other groups to reduce stress and the amount of time spent in traffic. Publically assisted evacuation   plans identify ways to provide transportation to people who cannot evacuate on their own (e.g., because they do not own a car or cannot drive).

No matter what evacuation method is used, an effective communication plan is key.   [38] Older adults need clear, concise messages from trusted sources, and these sources may differ by community (see Communicating with Older Adults in an Emergency, page 4).

that are due to an event, and the location of remaining community resources.[40] During the pre-event phase, GIS mapping is useful for identifying geographic areas with significant populations of older adults and the location of known individuals who may need help during an emergency. This demographic and location information can then be overlaid with data on potential hazards (e.g., volcanoes, flood plains, nuclear power plants, chemical manufacturing sites).

The resulting map can help emergency planners focus their educational and community awareness efforts on older adults in particular neighborhoods. It also can help them choose safer, more convenient locations for evacuation routes, shelters, transportation pickup points, supply distribution sites, and other services that older adults may need during an emergency.
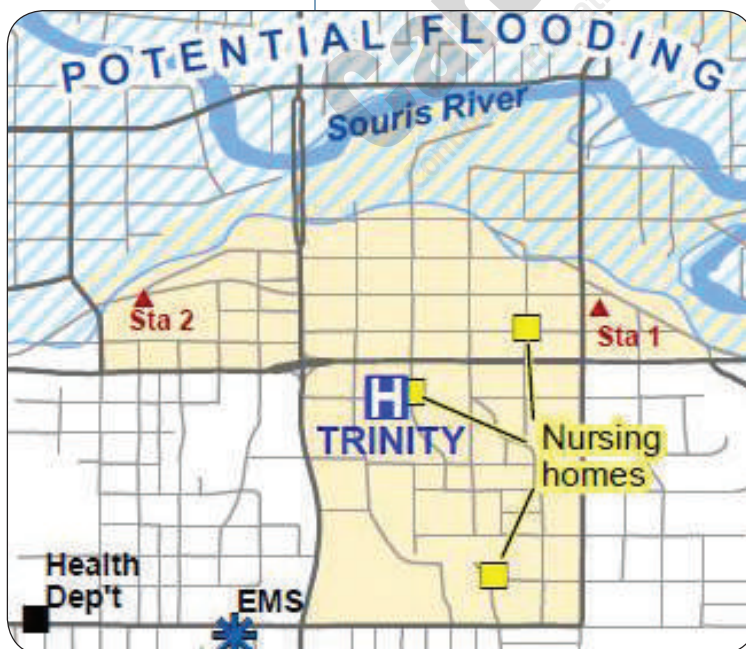
Barriers to Using GIS Technology

Although GIS technology can offer a lot of information to help officials protect vulnerable older adults in an emergency, it is not available in all jurisdictions. In addition, the Institute for Advanced Biometrics and Social Systems Studies has identified several barriers to communities using GIS technology. These barriers include a lack of specialized training, the high cost of software, a lack of awareness about existing data sets, and a lack of incentives for sharing data.[40]

Legal and Liability Considerations

The use of GIS technology to map populations also raises privacy, confidentiality, and liability concerns.[41] The data collected for emergency planning may or may not identify individuals. However, even when maps present only population-level data, individuals could be identifiable in small

communities. Under the Privacy Act of 1974, which applies to data collected by federal agencies, an individual's location may or may not be considered the individual's personal identifier.

With respect to privacy laws in general, the National Research Council notes that, "the law surrounding the collection, maintenance, use, and disclosure of personal information by researchers and others is typically vague, incomplete, or entirely absent."[41]

Another concern is liability associated with the accuracy and completeness of the data collected and disseminated as part of emergency management efforts. Agencies such as FEMA that present GIS data on their Web sites post disclaimers that state explicitly that they will not assume liability for the accuracy, completeness, or usefulness of the information provided.[42]

Building, Maintaining, and Using Registries

In the context of emergency preparedness, the purpose of a registry is to identify *before an event occurs* those individuals who may need special attention or help before, during, or after an emergency. Registries can be based on the specific type of help a person needs (e.g., medical, transportation, or other special needs), or they can be used for the broader purpose of identifying any person who might need any type of help during an emergency. Many jurisdictions also use registries as a way to provide information to older adults on how to prepare for emergencies.

Example of GIS Map

Types of registries may include the following:

- **Special needs registries** may have a broad scope, listing any person who might need help during an event, or be limited to specific special needs (e.g., individuals with specific types of physical or mental disability, impaired mobility, dependence on medication or medical equipment, or limited cognitive function). As discussed in the Introduction, the term "special needs" is not standardized and can have meanings that vary by context.
- **Medical needs registries** are limited to individuals who have specific, identifiable medical needs. These registries may require documentation from a doctor about the person's specific diagnosis and medical requirements (e.g., for oxygen or dialysis).
- **Transportation registries** identify people who cannot evacuate a location or area before an event without help (e.g., older adults, people with special or medical needs).

Legal Authority

Registries can be mandated by state law or local ordinances, or they may be developed by any government official in the normal course of his or her duties, subject to enabling legal authority. Local ordinances (e.g., those enacted by city or county governments) may direct a local agency or office to develop and maintain a registry of people with special needs, although such authority is not required.

Development, Maintenance, and Resources

Local registries are often the product of collaborations between government entities, community groups, and social service providers. In some jurisdictions, registries are developed and maintained by a local or state government entity, such as the office of emergency management. In areas where funding is limited (e.g., rural areas), groups may pool their resources to develop regional registries.

To account for changes in place of residence, special needs, and other factors for people already registered, as well as for incremental additions, registries must be updated regularly. Keeping registries up-to-date is difficult because the number of potential registrants is always changing as people visit or move into or out of a given area. Methods for maintaining and updating registries include annual reminders to registrants to review their information. These reminders can be sent with utility bills.

Registry development and maintenance requires sustained staffing and resources. Some jurisdictions fund registries through emergency response funds, while others rely on volunteers and community collaboration.

Methods for collecting information on registrants may include the following:

- A Web form that people can use to submit and update their information.
- A central phone number that people can call to register.
- Social service workers or volunteers who collect information from clients when they apply for other public health services.
- Direct-mail registration forms that people can fill out and return.

Some older adults might be distrustful of providing personal information to an unknown entity. For this reason, registry officials may find it easier to collect personal information and register older adults in person at a senior center or through a known service provider, such as a home health care aide.

Legal Considerations

Liability

Jurisdictions may be concerned about liability and about creating the expectation that, by enrolling an individual into a registry, help is guaranteed. To address this concern, many jurisdictions require

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Identifying Vulnerable Native Populations

One way to identify areas of need in an emergency is to estimate the number of vulnerable older adults in a community and compare it with the number of potential caregivers. This caregiver ratio index can help planning officials identify the resources available to meet the community's needs and the gaps that may exist in an emergency.

This issue is especially important for American Indian and Alaska Native (AI/AN) populations, which often live in separate, distinct communities. [44] AI/AN populations are shifting in ways that can affect the way officials plan for emergencies. For example, in some communities, the number of younger adults who could serve as caregivers has dropped in comparison to the number of vulnerable older adults who need help.

Researchers are also using GIS technology to map the migration of younger AI/AN adults and the concentrations of vulnerable older adults. The resulting data can help officials plan for emergencies.

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that registrants be fully informed about the following:

- With whom the information will be shared.
- How information will be used.
- Security measures in place for protecting information.
- The type of help that may be available.
- Limitations on help (e.g., help is not guaranteed).

Effectiveness

Registries are used with varying degrees of effectiveness and are influenced by factors such as geography, demographics,

perceived risks, requirements for updates and maintenance, and resource allocation. Communities should fully assess whether they can support a registry and tailor their registration process to the specific demographics of their community. Although many state and local jurisdictions have developed registries, few have been evaluated to assess their utility, effectiveness, or impact.

Using Shelter Intake Procedures to Identify Vulnerable Older Adults

Sheltering people affected by disasters is a key component of emergency management and response. Shelters provide temporary protection and refuge during and immediately after an emergency or hazard. The shelter intake process also can be an effective way for emergency management officials to identify older adults in the community who need special help.

Requiring Shelter Accommodations for Older Adults: Florida

Some states mandate that shelters provide space for populations with special needs, such as vulnerable older adults. In Florida, the State Emergency Management Act requires the Division of Emergency Management (DEM) to submit a state plan that identifies the location and size of special needs shelters. [45] The state Department of Health is required to help the DEM meet the needs of people with special needs, who are identified through registries and other sources.

Categories of shelters have historically included general population shelters, special needs shelters, medical needs shelters, pet-friendly shelters, specialty population shelters, and unconventional shelters. Unconventional shelters include any type of facility, such as hotels, motels, tents, prefabricated modular facilities, trains, or ships, that are used when traditional shelters become full.

In November 2010, FEMA released its *Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters.* This publication provides guidance to emergency managers and shelter managers on how to meet access and functional needs of all people in general population shelters.[16] Although FEMA's Functional Needs Support Services (FNSS) guidance does not require new legal obligations, it emphasizes existing legal rights, such as accessibility and nondiscrimination.

Under the new FNSS guidance from FEMA, the types of shelters will include the following:

- **General population shelter:** An organized, temporary accommodation for people displaced by an event or disaster, also referred to as a congregate or emergency shelter. Individuals with functional and access needs are accommodated in this type of shelter if they do not require sustained or ongoing medical supervision.
- **Medical special needs shelter:** A shelter that serves people who need sustained help or

supervision of their medical needs, but who do not have an acute condition requiring hospitalization.

The American Red Cross operates general population shelters in times of emergency and has an organizational commitment

to serve all people affected by disasters, including people with disabilities and functional or access needs. To help integrate the new FNSS guidance into its operations, the American Red Cross developed and distributed internal guidance for its chapters.[46]

Planning for Discharge of Vulnerable Older Adults: Florida

Any emergency can leave people displaced and in need of shelter, food, and support services, temporarily or long term. People evacuated to temporary settings such as shelters, hospitals, or other facilities may not be able to return home safely after an event or disaster, or they may need support after they return.

Discharge planning is the process of moving people from temporary shelters back into the community during the recovery and transition phase of an emergency. People may go back to their former home or to alternative housing. [47] Discharge planning must begin before an emergency to ensure that all necessary partners are involved. By planning ahead, emergency management officials can make sure that the health of vulnerable older adults does not decline (especially if they have to stay in shelters for long periods) and that older adults are not released into the community without proper support.

The Aging Services Network often takes the lead in helping older adults move back into their communities after an emergency. Partners may include local and state health departments, community service agencies, the U.S. Department of Veterans Affairs, state agencies that serve people with disabilities and their families, emergency management organizations, housing coalitions, hospitals, and assisted living facilities.

Creating Discharge Planning Teams
In 2006, the Florida legislature enacted House Bill 7121 to improve the state's emergency management efforts and amend the statute that governs special needs shelters (Section 381.0303). The new law calls for the creation of multiagency discharge planning teams for special needs shelters and states that these teams should have specific duties and include members of specific state agencies. The legislation authorizes the Secretary of the Florida Department of Elder Affairs to convene a discharge planning team at any time it is needed to help local areas set up special shelters. Local agencies can contact state officials if they need help.

Members of the discharge planning team work with shelter clients or their caregivers to fill out a Discharge Planning Tool for Rapid Needs Evaluation form. This form helps officials determine if clients will be able to return to their former home when a shelter closes. If a person needs alternative housing, the team helps find housing and ensures that support services are available.

Legal Authority

Sheltering for individuals with special needs, including vulnerable older adults, can be mandated by state law or local ordinances or by any government official in the normal course of his or her duties, subject to enabling legal authority. Local ordinances enacted by city or county governments may direct a local agency or office to develop sheltering plans for people with special needs, although such authority is not required.

The ADA requires that shelter operators make reasonable accommodations and modifications to shelter procedures, including the provision of auxiliary aids and services, as well as accommodations for service animals.

Planning Considerations

Partnerships are critical in planning and operating shelters because the complex issues that arise during an emergency cannot be solved by one organization; the required activities are cross-cutting. Groups that can

be involved in shelter planning may include the following:

- Aging Services Network.
- Community service agencies (e.g., American Red Cross, United Way, Meals on Wheels, senior centers).
- Emergency management agencies.
- Faith-based organizations.
- Public health agencies.

The special needs of older adults may present certain challenges to shelter officials. For example, some older adults may be able to walk on their own, while others may need devices such as canes, crutches, or walkers. Some may be dependent on certain electrical equipment or need help with medical care, such as someone to give them their medication or a nurse to monitor their health.

Some older adults may be dependent on others to help them with routine care and activities of daily living, such as eating, walking, toileting, and personal hygiene.

Challenges to providing appropriate shelter to older adults include the need to

- Respond to the continually changing and evolving nature of the specific event or hazard.
- Get the appropriate durable medical equipment.
- Provide a safe, secure environment that takes into account the potential for abuse and neglect of older adults because of their cognitive and physical impairments.
- Provide staff members who have been trained to care for the specific physical, cognitive, and emotional needs of older adults.

When planning for older adults, officials must ensure that shelter facilities meet the special needs of this population. For example, shelters must

- Be accessible to people who need help or certain accommodations to perform routine care or activities of daily living (e.g., to use the bathroom, bathe, dress, groom, or get into and out of bed).
- Be accessible to people who have certain disabilities, such as those who use a wheelchair.
- Include signs and other forms of communication that can be understood by older adults.
- Include energy sources for electricity (i.e., generators), heating, and air conditioning.

Individual Concerns

Many older adults may be affected by some degree of cognitive impairment, limited mobility, and vision or hearing impairment. Older adults also are more likely to

be affected by medical conditions that require medication, oxygen, or medical devices. These impairments and special needs can make it more difficult for older adults to manage their experience in a shelter. Other issues to consider include

- Can the person sleep on a cot or mat?
- Does the person have a stable medical condition or an unstable condition that requires ongoing medical, nursing, or other health care?
- Are there mental health issues that need to be addressed (e.g., isolation, fear, anxiety, depression)?
- Are there caregivers who also need shelter and support services?
- Are there service animals that must be accommodated?
- Are there family pets that must be accommodated?

Because of these conditions and concerns, older adults may require and benefit from the services that are available in special needs or medical shelters.

Liability

When planning for the sheltering and mass care of older adults and others with special needs, organizations are often concerned about their potential liability. Because laws are different in each state, the planning process should include an examination of each jurisdiction's liability laws and how they might apply to shelter operators or the owners of facilities used as shelters. Some states, such as Hawaii, encourage property owners to make their facilities available for use as shelters during emergencies by granting immunity from liability if the owners meet certain conditions.[48]

Sheltering in Place, Social Distancing, and Other Forms of Isolation

Although most older adults live in the community rather than in institutional settings, many are only able to live independently with help from friends, family members, caregivers, or in-home services that provide meals, home-based health care, and help with chores and personal care needs.

Some emergencies require isolation measures such as sheltering in place or keeping a physical distance from other people during a disease outbreak (called *social distancing*). Isolation from their support network may make community-dwelling older adults more vulnerable during an event or disaster, and these potential risks should be addressed in preparedness plans (see Table 4).

Table 4. Planning Concerns for Sheltering in Place, Social Distancing, and Other Forms of Isolation

Emergency Action	Definition of Action	Planning Concerns
Sheltering in place	Occurs when people are warned to remain indoors and to make a shelter out of the place where they are located. Sheltering in place may be necessary during an event such as a chemical spill or radiation emergency.	• Promoting personal preparedness. • Communicating risk to older adults. • Educating the public about safety issues.
Social distancing	Refers to infection control measures that limit the spread of pandemic influenza or other infectious agents by reducing the opportunity for people to come in contact with infected persons.	• Planning for disruptions in access to routine medical care. • Managing obstacles for in-home service providers to make health visits, deliver meals, or perform other home-based services. • Managing limitations in the continuity of operations plans of home health care agencies.
Isolation due to circumstances	Occurs when people are isolated at home because of weather or other environmental events, such as an ice storm or flooding, that interrupt normal daily activities.	• Planning for disruptions in access to routine medical care. • Managing obstacles for in-home service providers to make health visits, deliver meals, or perform other home-based services. • Managing limitations in the continuity of operations plans of home health care agencies.

4
ACTION OPTIONS

The purpose of this guide is to present critical information, strategies, options, and resources for identifying and protecting vulnerable older adults during all-hazards emergencies. A key component of this information are action options that can be implemented at the community, regional, tribal, state, and national level to better protect this population.

The action options presented in this section reflect guidance provided by the work group and technical consultants who helped develop this guide, as well as findings from field-based research and site visits. The action options are grouped according to a particular step in the planning process, and those that are relevant to more than one step are repeated. Under each step, we provide suggestions for concrete actions that may help jurisdictions at all levels improve their ability to plan for and protect vulnerable older adults during all-hazards emergencies.
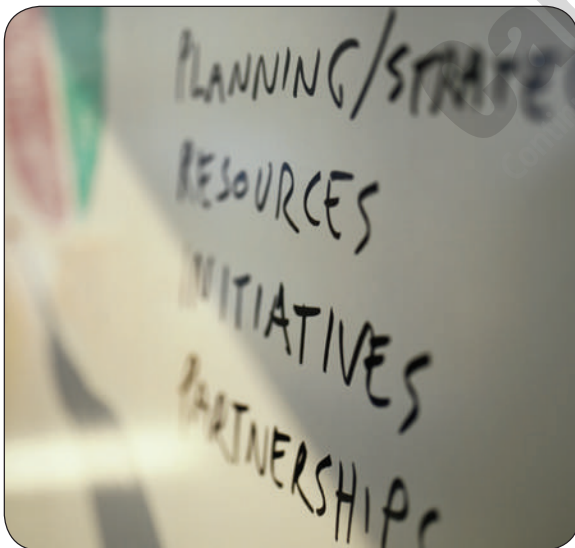
Reaching Older Adults in Emergencies: Vote & Vax

Vote & Vax is a program that helps local health departments and other groups offer flu shots at or near polling places on Election Day. On November 4, 2008, Vote & Vax delivered more than 21,000 flu shots at 331 polling places in 42 states. In addition to helping protect people against the flu, the Vote & Vax model gives local public health officials a new way to respond to large-scale emergencies.

The 186,000 polling places located across the United States are in every community and near every person's place of residence. They are in schools, senior centers, churches, fire stations, and other well-known community settings. Older adults, who make up more than two-thirds of all voters, are familiar and comfortable with these locations, which are legally required to be accessible to people with disabilities.

Using Polling Sites to Respond to Emergencies
In an emergency, public health officials must decide quickly how and where to send health care workers, equipment, and medicines to stop the spread of infectious diseases. Polling places are good locations because they are in every neighborhood, and people usually know where they are.

By providing health interventions at several small locations instead of one central location, health officials limit how far people have to travel or the amount of time they are exposed to a hazard, which can prevent the spread of disease.

Vote & Vax was developed by SPARC (Sickness Prevention Achieved through Regional Collaboration), a nonprofit organization based in New England that has received support from CDC's Healthy Aging Program (see www .cdc.gov/aging/states/sparc.htm).

For more information about the Vote & Vax program, visit www.voteandvax.org.

Action: Develop Plans

A. **Identify** emergencies and hazards most common in a jurisdiction. Create plans that address specific needs among vulnerable older adult based on these emergencies and hazards, such as evacuation assistance, continuity of home-based health care, and sheltering options.

B. **Plan for and develop** triage and delivery systems that allow routine medical care to continue for older adults during periods of social distancing (e.g., during an influenza pandemic).

C. **Conduct** community, regional, tribal, and state meetings to ensure coordination of preparedness plans that protect older adults during emergencies. These meetings should

   ➤ **Address** whether the same people or organizations (e.g., service providers, medication and food suppliers, first responders) are named in each plan and whether they can handle a large-scale emergency response involving older adults.

   ➤ **Establish** responsibilities for protecting older adults at the local or community level and clarify when responsibility may be transferred to state or federal agencies.

D. **Examine and adapt** existing community preparedness models to help local service agencies plan for and protect older adults.

E. **Include** representative older adults in emergency response planning at all levels (community, regional, tribal, state, and national).

F. **Develop** templates of emergency management plans for protecting older adults that can be customized to the needs of local agencies.

G. **Use and adapt** recommended planning templates to create inclusive plans that address the needs of older adults in emergencies.

H. **Create** written agreements or memorandums of understanding between partners with specific provisions that

   ➤ **Establish** communications systems that meet the specific needs of vulnerable older adults.

   ➤ **Plan** for the evacuation, transportation, and sheltering requirements of older adults.

   ➤ **Address** special needs of older adults, such as medications, medical equipment, and functional equipment.

I. **Require** contracting agencies that serve older adults (e.g., home health, social service, meal delivery) to make contingency plans and continuity of operations plans (COOPs) to ensure that clients' needs are met during an emergency. Monitor these plans to ensure that the needs of older adults are included in COOPs.

J. **Develop and use** COOPs that provide for coverage of services and care for vulnerable older adults in the event that large numbers of key or essential providers (e.g., staff working for home health or social service agencies or in long-term-care facilities) become ill, remain home caring for sick family members, or are otherwise not available because of an emergency.

K. **Develop** pre-event messages that are specific to the hazards likely to occur in your community. In particular, you should

   ➤ **Create** messages that are geared to the health literacy levels of older adults in your community. Take into account language, culture, and vision or hearing limitations.

   ➤ **Build** partnerships with local media (e.g., radio and television stations) so they will air messages for older adults in an emergency.

L. **Create and track** incremental, measureable, and outcome-oriented goals and intermediate benchmarks related to your jurisdiction's ability to plan for and protect older adults in emergencies.

M. **Use** tracking or identification systems (e.g., ankle or wrist ID bracelets) in shelters and other settings to identify older adults who may have cognitive or other impairment. Link identification information to American Red Cross databases when possible.

N. **Ensure** that requirements for emergency preparedness grants at the state and local level include planning for the protection of older adults.

O. **Prepare** standardized profiles of your jurisdiction that include relevant information about the older adult population, such as demographics, the prevalence of major health conditions, and medication usage. Make this information available to all preparedness partners.

   ➤ **Identify** the available data sources. Identify and refine the specificity of the data needed to protect older adults.

   ➤ **Use** existing data and information to predict what medications will be needed to treat medical and behavioral problems common among older adults.

Action: Collaborate with Partners

A. **Identify** critical partners to help you develop a comprehensive, inclusive, community-based plan to protect vulnerable older adults in an emergency. These partners should include the following:

➤ Adult protective services.

➤ Aging Services Network.

➤ American Red Cross.

➤ Community-based organizations.

➤ Elected/appointed public officials (city/county).

➤ Emergency coordinators.

➤ Faith-based organizations.

➤ First responders.

➤ Federal partners (when appropriate), such as the following:

•• U.S. Department of Health and Human Services and its agencies, including CDC, the Administration on Aging, the Centers for Medicare & Medicaid Services, the Office of the Assistant Secretary for Preparedness and Response, the Indian Health Service, the Food and Drug Administration, and the Health Resources and Services Administration).

•• U.S. Department of Transportation.

•• U.S. Department of Homeland Security agencies, including FEMA.

•• Public health agencies.

➤ Private-sector partners, such as the following:

•• Pharmacy chains.

•• Corporations.

•• Financial services companies.

•• Assisted living centers.

•• Home health agencies.

•• Faith-based organizations.

➤ Older adults.

➤ Social service providers.

➤ Tribal organizations.

➤ Transit/transportation authorities.

➤ Voluntary Organizations Active in Disaster (VOADs).

B. **Identify or establish** an agency at a community or regional level with a designated leader in charge of planning for and protecting older adults.

C. **Create** a leadership team with members who represent major stakeholder groups for protecting older adults, such as the Aging Services Network, local/regional public health agencies, metropolitan planning organizations, regional or local governments, emergency management organizations, law enforcement, VOADs, legal organizations, and transportation authorities. The role of this team is to

- ➤ **Inspire or initiate** activities to protect older adults.
- ➤ **Convene** relevant stakeholders and partners.
- ➤ **Ensure** accountability to and ultimate responsibility for vulnerable older adults.
- ➤ **Oversee** activities related to vulnerable older adults.
- ➤ **Assess** the capabilities and training needs of partner agencies.
- ➤ **Model** collaboration for all partner agencies.
- ➤ **Form** operational groups (e.g., subcommittees on planning or logistics) to plan for and ensure protection of older adults.
- ➤ **Create** mechanisms to evaluate preparedness planning to ensure quality improvement.

D. **Develop or build** community or regional coalitions that are focused on protecting vulnerable older adults in emergencies.

E. **Encourage** partners at all levels to agree on terminology and definitions.

F. **Collaborate** with paratransit and transportation agencies and providers to ensure that information such as client lists, transportation capacity, and pickup locations is shared with emergency planners before or during an emergency.

G. **Include** home health agencies in preparedness exercises to evaluate whether their COOPs ensure continuity in meeting the needs of older adults.

H. **Collaborate** with utility companies to promote and maintain their registries of clients who are dependent on power for medical equipment.

Action: Collect and Use Data

A.   **Prepare** standardized profiles of your jurisdiction that include relevant information about the older adult population, such as demographics, the prevalence of major health conditions, and medication usage. Make this information available to all preparedness partners.

   ➢ **Identify** the available data sources. Identify and refine the specificity of the data needed to protect older adults.

   ➢ **Use** existing data and information to predict what medications will be needed to treat medical and behavioral problems common among older adults.

B.   **Encourage** human services agencies to obtain consent to share information when they make home visits to older adults so this information can be used in preparedness planning (e.g., for geographic information systems [GIS] mapping).

C.   **Collaborate** with providers who work with the Aging Services Network or with public health, home health, and other service agencies to use their client information for GIS mapping.

Action: Conduct Training and Exercises

A.   **Train** key workforce members across multiple sectors in your jurisdiction how to meet the unique needs of vulnerable older adults.

B.   **Train** key staff in your jurisdiction to use GIS technology to map older adult populations, likely public health hazards, and existing and needed services. Use GIS mapping in planning, response, and recovery efforts.

C.   **Develop and use** exercises to test plans for protecting older adults. Use the results to modify these plans.

D.   **Include** scenarios specific to the needs of older adults in emergency preparedness exercises. Develop mutually agreed upon answers and solutions to problems encountered in full and tabletop exercises.

Action: Build, Maintain, and Use Registries

A.   For communities that decide to use registries, **create** a registration process that is easily accessible to older adults and that takes into account the potential barriers for this population. Examples of these barriers include the following:

- ➢ Limited access to technology or the Internet.
- ➢ Cognitive impairment.
- ➢ Lack of perceived risk.
- ➢ Fear of providing personal information to strangers.
- ➢ Reluctance to ask for help.
- ➢ Fear of losing independence.
- ➢ Lack of transportation or ability to evacuate independently.
- ➢ Physical disabilities.

B.   **Consider** specific legislation or ordinances that require local governments to develop and maintain registries for individuals with special needs, including vulnerable older adults.

C.   When enrolling older adults in registries before an event, **ensure** that the consent form offers flexibility for sharing information.

- ➢ **Use** a consent form that allows information to be shared with other agencies for the purpose of providing help as part of emergency preparedness, response, and recovery.
- ➢ **Consider** language that protects individual privacy by limiting use to emergency preparedness planning only.

D.   **Include** a specific provision on registration forms that permits sharing of any of the registrant's information with key community partners who will provide help in an emergency.

Action: Use Law-Based Solutions

A. **Review** relevant state and local legal authorities in collaboration with public health law attorneys to determine if these authorities have any implications related to protecting vulnerable older adults during emergencies.

B. **Research** state statutes and legal databases to identify and characterize requirements for confidentiality and privacy and to determine liability exposures that could be associated with creating registries, providing or sharing personal or other health information involving older adults, and using such information during all phases of planning for and responding to an emergency.

C. **Encourage** the development of or strengthen and use existing legal services programs and state bar systems to provide legal help to older adults in the recovery phase of an emergency.

D. **Consider** state or local laws that require planning for and protection of older adults during all-hazards emergencies.

E. **Consider** polices and statutes that reimburse local agencies for preparedness activities that involve older adults.

F. **Identify** obstacles and remove legal barriers to sharing demographic information that is integral to protecting older adults in emergencies.

G. **Improve** understanding and use of legal tools and frameworks, such as the Emergency Management Assistance Compact (EMAC), to facilitate planning and response measures for protecting older adults during emergencies.

H. **Consider** legislation or ordinances that require local governments to develop and maintain registries for individuals with special needs, including vulnerable older adults.

I. Pursuant to the requirements of the Older Americans Act and other laws, state units on aging and area agencies on aging can **encourage** and advocate for policies and statutes that mandate planning for and protecting older adults in all-hazards emergencies.*

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* Federal grantees are prohibited from using federal funds for lobbying purposes.

J.   **Develop** new or expand existing judicial bench books to reflect state and local laws that can be used to plan for and protect older adults in emergencies.

K.   **Include** a specific provision on registration forms that permits sharing of any of the registrant's information that is needed to provide help in an emergency.

L.   **Provide** tools that court-approved surrogates or guardians for older adults can use to develop preparedness plans for their wards.

M.   **Ask** human services agencies to obtain consent to share information when they make home visits to older adults so this information can be used in preparedness planning.

N.   **Create** written agreements or memorandums of understanding between partners with specific provisions that

   ➢ **Establish** communications systems that meet the specific needs of vulnerable older adults.

   ➢ **Plan** for the evacuation, transportation, and sheltering requirements of older adults.

   ➢ **Address** special needs of older adults, such as medications, medical equipment, and functional equipment.

Action: Prepare Older Adults and Caregivers

A.   **Consider** the essential roles and needs of caregivers when planning for the needs of vulnerable older adults in an emergency. Address caregivers and older adults in emergency preparedness messages and involve them in planning efforts (e.g., developing registries, setting up shelters).

B.   **Promote** personal preparedness in the older adult community and provide resources and support to programs that help older adults develop personal preparedness plans.

C.   **Provide** tools that court-approved surrogates or guardians for older adults can use to develop preparedness plans for their wards.

Action: Shelter Older Adults

A.   **Train** shelter staff to recognize and provide appropriate care for the physical, cognitive, and emotional health needs that are common among older adults.

B.   **Train** shelter staff how to implement the guidelines in FEMA's *Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters* and how this guidance can be used to address the special needs of older adults.

C.   **Plan** for the security and safety of all older adults in shelters, especially those with cognitive impairment (e.g., address the need to provide room for caregivers to stay with older adults).

D.   **Develop** intake and triage systems that identify older adults who might need Functional Needs Support Services.

E.   **Develop** discharge and reintegration plans that address the specific needs of older adults (e.g., reestablishment of home-based medical and social services, help with home repairs or finding a new residence).

Action: Take Action at the National Level

A.   **Consider** federal laws that require planning for and protection of older adults during all-hazards emergencies.

B.   **Develop** templates of emergency management plans for protecting older adults that can be customized to the needs of local agencies.

C.   **Ensure** that requirements for emergency preparedness grants at the state and local level include planning for the protection of older adults.

D.   **Train** key workforce members across multiple sectors in your jurisdiction how to meet the unique needs of vulnerable older adults.

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MOVING FORWARD

CDC and its work group partners hope this publication can help those involved in emergency preparedness planning at all levels understand the unique vulnerabilities of older adults during all-hazards emergencies. We offer concrete strategies and options for identifying and protecting this population during an emergency or hazard.

We have also created a companion Web site of additional information, resources, and tools. This Web site is designed to help officials from multiple sectors—including public health, aging services, emergency management and response, social services, community organizations, and home health care—protect vulnerable older adults during all-hazards emergencies.

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