OLDER ADULTS AND EMERGENCY PREPAREDNESS

Brian Fink, PhD
Paul Rega, MD

Objectives

• The learner will identify specific aspects of the older individual that makes him/her more vulnerable in a disaster.
• The learner will develop a plan that will minimize that vulnerability.

Premise

• Emergencies and disasters can strike quickly and without warning and can force older adults to evacuate their neighborhood or be confined to their home.
• Basic utilities and communications can be cut off.
• Water, gas, electricity, etc.
Normally, the geriatric patient

• Highest number of patients coming to hospitals and EDs by ambulance;

• Highest hospitalization rate

• Highest mortality and greatest length of stay for influenza-related hospitalizations;

Major Physiologic/Psychosocial Vulnerabilities

• Cardiovascular changes
• Neurological decline
• Elasticity of skin
• Immunosenescence
• Co-morbidities
• Impaired mobility
• Cognitive change
• Social isolation
• Economic constraints
• Caregiver dependence

• Normal physical limitations of aging,
impairment in physical mobility,
diminished sensory awareness,
chronic health conditions,
and social and economic limitations
Of those age 65 years and above

- 52% report some type of disability
  - 37% report severe disability
  - 16% require assistance as result of disability
- 27% have difficulty with ADLs (community-dwelling)
  - An additional 14% have difficulty with IADLs

- www.cdc.gov/pct/issues/2008/jan/07_0135.htm

Of those age 65 years and above

- 80% have at least 1 chronic health problem
  - 50% have at least two
- 50% have hypertension
- 36% have arthritis
- 20% have CAD
- 20% have cancer
- 15% have diabetes
- 9% have CVD

- www.cdc.gov/pct/issues/2008/jan/07_0135.htm

Psychosocial considerations in aged

- Coping mechanisms tend to be used lifelong.
- Stress reactions: exacerbated, present differently.
  - Inability to act is common reaction to disaster situations.
- May be more dramatic in cognitive impairment.
- May be unable to respond appropriately to protect themselves.
  - Anxiety & depression in older adults may be attributed incorrectly to the aging process.
  - Withdrawal and isolation may keep older adults from seeking help.
Psychosocial considerations in aged

- Confusion
  - In pre-existing dementias, greater confusion may develop.
  - Cannot always be attributed to dementia.

- Other conditions (e.g. dehydration, injury, delirium, infections, depression, constipation) may present as confusion

Healthy, Older Adults

- Generally do well under ordinary circumstances

- In a disaster, the loss of physiological reserves associated with aging and other physical limitations, such as sensory deficits, cognitive disorders and chronic illnesses, can put them at risk.

The Frail & Elderly

- In addition to physical limitations and cognitive disorders, chaotic circumstances and unfamiliar settings may heighten confusion and agitation, complicating care
### The bottom line...

- “The vulnerability of the elderly to disasters is related to their impaired physical mobility, diminished sensory awareness, chronic health conditions, and social and economic limitations that prevent adequate preparation for disasters, and hinder their adaptability during disasters.”

### In Disasters

- About 75% of people who died during Hurricane Katrina were 75 years of age or older.
  - >60% of the evacuees who died in Houston were age 65 or older. (made up only 15% of population)
- NYC: During the August 2003 blackout in the city, most adult hospital admissions were elderly individuals whose electrically-powered medical devices failed
- During the 1995 heat wave in the Midwest, the median age of the 465 people in Chicago whose deaths were heat-related was 75

### Lessons Learned from Recent Disasters

- Difficulty locating and tracking seniors and other vulnerable adults.
- Inadequacy of extant shelter options and difficulty gaining access for those in need.
- The need for geriatric specialists (multi-disciplinary)
- The importance of cooperating with community-based and citywide agencies that have knowledge of seniors and their needs
- The frail elderly: Physical limitations & cognitive disorders
- The need to address post-disaster, long-term needs
PREPAREDNESS

Identify Frail or Disabled Elderly Individuals and Other Vulnerable Adults Before a Disaster

• Advice for patients, their caregivers and their adult children about disaster preparedness methods for the home
• Referral to community agencies and community-based disaster planning resources, such as shelter-in-place initiatives, alternative care sites or alternate, home-based resources
• Health care proxy and non-hospital Do Not Resuscitate forms,
• Alternative Care Sites

Three Steps to Preparedness

• Get a kit.

• Make a plan.

• Be informed.
Kit

• For your safety and comfort, have a disaster supplies kit packed and ready in one place before a disaster hits.

• Assemble enough supplies to last for at least three days.

• Store your supplies in one or more easy-to-carry containers, such as a backpack or duffel bag.

Kit

• Store supplies in a container that has wheels.

• Be sure your bag has an ID tag.

• Label any equipment, such as wheelchairs, canes or walkers, that you would need with your name, address and phone numbers.

• Keeping your kit up-to-date is also important.

Basic Needs and Supplies

• Water, one gallon per person / day

• Food, canned and dried work well

• Flashlight with batteries

• Battery or crank radio

• First aid kit and manual

• Medications and medical items (week supply)

• Multipurpose tool

• Sanitation and personal hygiene items
Basic Needs and Supplies

- Copies of personal documents
- Cell phone with battery and charger
- Family and friends’ emergency contact information
- Cash and coins
- Emergency blankets
- Maps
- Whistle
- Change of clothing
- Manual can opener
- Pet supplies
- Extra set of keys

The GeriGoBag

- Waist or fanny bag with buckle or velcro strap attached to person’s waist, wheelchair, or hospital bed to ensure transfer of contents during transport and hospitalization
- Needed small equipment
- Minimum 4-day supply of regular medications, labeled to identify individual pills
- Maximum 3-page medical history that includes:
  - Description of baseline mental and physical status
  - Conditions for which currently under treatment
  - Pertinent past illnesses
  - List of current medications and doses
- Personal identification, including:
  - Name, address, phone number
  - Copy of insurance card(s)
  - Contact information for physician(s), pharmacies, local and distant family or caregiver(s)
  - Copy of advance directive (proxy or living will)
  - Copy of non-hospital do-not-resuscitate order if pertinent and other pertinent information if the patient is cognitively impaired
- Hearing aid and extra batteries
- Extra dentures or denture case
- Extra eyeglasses with eyeglass chain or lanyard in a hard eyeglass case
- A pair of warm socks
- Face mask

Cold Climate Supplies

- Jacket or coat
- Long pants and long-sleeve shirt
- Sturdy shoes
- Hat, mittens and scarf
- Sleeping bag or warm blanket
Supplies For Your Vehicle

• Flashlight with extra batteries and extra bulbs
• Maps
• First aid kit and manual
• Tire repair kit and jumper cables
• Flares
• Bottled water
• Non-perishable foods such as granola bars

Seasonal Supplies For Your Vehicle

• Winter: Blanket, hat, mittens, shovel, sand, tire chains, windshield scraper, florescent distress flag

• Summer: Sunscreen lotion SPF 15 or higher, shade item (umbrella, wide-brimmed hat, etc.)

Make A Plan

• Explain your concerns to your family and others in your support network and work with them as a team to prepare.

• Arrange for someone to check on you at the time of a disaster. Be sure to include any caregivers in your meeting and planning efforts.
Make A Plan

• Assess yourself and your household. What personal abilities and limitations may affect your response to a disaster?

• Think about how you can resolve these or other questions and discuss them with your family and friends. Details are important to ensure your plan fits your needs. Then, practice the planned actions.

Make A Plan

• Family Communications Plan

• Community Disaster Plans

• Escape routes and meeting places

• Post-emergency phone numbers near your phone

Make A Plan

• Plan for those with disabilities

• Plan for your pets or service animals

• Utilities

• Smoke and carbon monoxide alarms

• Insurance coverage

• Vital records and documents
Be Informed

• Community Hazard Assessment
  • What hazards threaten your community and neighborhood? Make a list of how they might affect you.
  • Think about both natural (e.g., hurricanes, flooding, winter storms and earthquakes) and human-caused (e.g., hazardous materials and transportation accidents) and about your risk from those hazards.

Be Informed

• Community Warning Systems
  • How will you be notified of a possible emergency?
  • Know how local authorities will warn you of a pending or current disaster situation and how they will provide information to you before, during and after a disaster.

Be Informed

• Friends, Family Caregivers, and Neighbors
  • Before a disaster happens it is a good idea to have a conversation with those in your support network: your friends, family and neighbors.
  • Let them know your needs in an emergency situation; ask them how they could assist with your plan and whether they would be willing to help.
  • Consider that during some emergencies travel is severely limited and they may not be able to get to you.
### Be Informed

- Connect with local emergency response teams, fire departments, and television and radio stations with emergency alert systems.
- NOAA Weather Radio/All-Hazards Alert Radio

### Know How to Shelter in Place

- In some emergencies such as a chemical emergency, you would need to know how to seal a room for safety on a temporary basis, called “shelter in place.”
- In the case of a winter storm, you may be told to “stay at home.” This means stay where you are and make yourself as safe as possible until the emergency passes or you are told to evacuate.

### Public Shelters

- Relief organizations, like the American Red Cross, may open shelters if a disaster affects a large number of people or the emergency is expected to last several days.
Public Shelters
• Be prepared to go to a shelter if
• Your area is without electrical power.
• Floodwater is rising.
• Your home has been severely damaged.
• Police or other local officials tell you to evacuate.
• Pet care necessities

RESPONSE

Seniors without Families Triage (SWiFT) Tool
• a public health screening tool used to distinguish patients who can function independently from those who require assistance in activities of daily living (ADL)
### Seniors without Families Triage (SWiFT) Tool*

**SWiFT Level 1**
Cannot perform at least one basic activity of daily living (ADL): eating, bathing, dressing, toileting, walking without assistance
Action: Transfer to a location that can provide skilled or personal care such as an assisted living facility, nursing home or hospital

**SWiFT Level 2**
Has trouble with instrumental activities of daily living (IADL) such as finances, benefits management, assessing resources
Action: Connect to a local agency services case manager

**SWiFT Level 3**
May need only minimal assistance with ADL and IADL
Action: Connect to a rescue organization service such as the Red Cross

* May be used before a disaster event or at other times when appropriate

[www.bcm.edu/pdf/bestpractices.pdf](http://www.bcm.edu/pdf/bestpractices.pdf)

---

### The challenge grows

- The sheer numbers of the aging population give an even greater urgency to addressing the needs of older adults following a disaster.
  - People aged 85 or older are the fastest growing segment of the U.S. population
- The U.S. population aged 65 or older is expected to almost double in size within the next 25 years
- By 2030, some 72 million people — almost one of every five Americans — will be aged 65 or older

---

### Summary

- Listen for information on the radio and TV about hazardous weather and other events, and heed the advice of local officials. Leave right away if told to do so.

- In some communities, people who need help or transportation during an evacuation are asked to register that need with their local government.
Summary

• Call your local emergency management office for information about what to do during an evacuation. It is important to have alternative plans in case circumstances change.

• Gather essential supplies, and be sure to keep a list of medications and their dosage, a copy of your eyeglass prescription and other important papers to take with you if you have to leave your home.

Selected References


• Aldrich N, Benson WF. Disaster preparedness and the chronic disease needs of vulnerable older adults. Prev Chronic Dis. 2008;5(1).


• Disaster Preparedness for Seniors by Seniors: http://www.redcross.org/images/MDMA_CustomProductCatalog/v4400366_Disaster_Prep

• Personal Preparedness for Older Adults and Seniors http://www.cdc.gov/aging/emergency/preparedness.htm.