

# Social Isolation and Disaster Preparedness in Senior Adults

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Session 3119.0, Emergency Preparedness and Older Adults

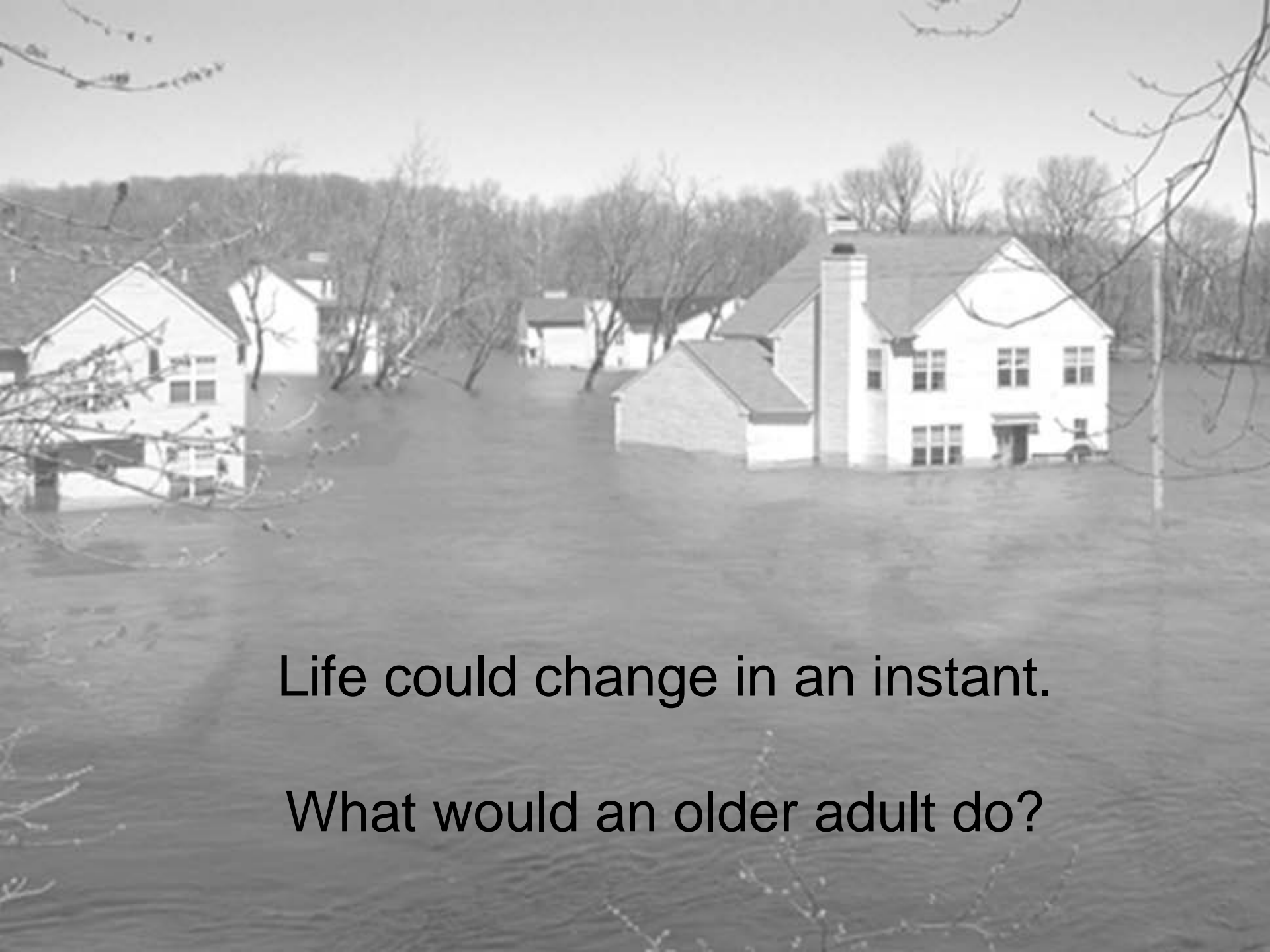
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**John A. Staley, PhD, MSEH**

- (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:**

**“No relationships to disclose”**



Life could change in an instant.

What would an older adult do?

## **What we learned from Katrina & Rita:**

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- In Katrina, 1,698 died in 3 states:
  - Almost half were over 75 years old (average age was 69)
  - 51% were black and 42% were white
  - 40% drowned, 25% died from trauma
  - Most deaths occurred in homes, in hospitals, in nursing homes and in evacuation centers

## **Disasters happen in Ohio:**

- 2008 Severe Winds from Hurricane Ike
- 2007 Severe Storms, Flooding, and Tornadoes
- 2006 Severe Storms, Straight Line Winds, and Flooding
- 2006 Severe Storms, Tornadoes, Straight Line Winds, and Flooding
- 2005 Severe Winter Storms, Flooding and Mudslides

## Why were *Seniors* so vulnerable?

- No emergency plan or supplies.
- Could not evacuate safely.
- No plan for special health needs
- No one was available and prepared to assist them.

\*Half of Katrina Victims Were Elderly, *The Associated Press*, August 28, 2008

# Ohio's Older Adult Population

- Age 60 and older will grow 52 percent by the year 2030- nearly 26 percent of the total state population
- The age 60 – 75 segment will continue to represent about two-thirds of the total older adult population, while the age 85 and older cohort will grow by 82 percent
- Ohio currently ranks sixth among states for age 65 and older population
- 40% of those age 65 and older report having some form of chronic condition; more than half of these have two or more disabilities

# Ohio's Older Adult Population

- Projections show that there will be more than twice the number of older adult Ohioans with disabilities by 2050, with much of the increase in the 85 and older age group
- More than 186,000 older Ohioans report raising their own grandchildren
- Nearly 25 percent of older Ohioans are also classified as rural, making up nearly 18 percent of the total Ohio rural population



Currently, at least 80% of older Americans are living with at least one chronic health condition, and 50% have at least two chronic conditions

Source: Centers for Disease Control and Prevention, 2003

Disasters happen. Are you ready?

text size A | A | A

## Ready Seniors Survey

Audio Off

Repeat

Help

Quit



Do you have a family member or friend who lives outside of your state?

Yes

No

Disasters happen. Are you ready?

text size A | A | A

## Ready Seniors Survey

Audio Off

Repeat

Help

Quit



Do you take prescription medicine?

Yes

No

Disasters happen. Are you ready?

text size A | A | A

## Ready Seniors Survey

Audio Off

Repeat

Help

Quit



Do you have a land-line telephone(one that works without electricity)?

Yes

No

Disasters happen. Are you ready?

**EMERGENCY INFORMATION CARD**  
Date Updated: \_\_\_/\_\_\_/\_\_\_

**My Information:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Birth date: \_\_\_/\_\_\_/\_\_\_

Daytime Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_ Evening Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

Cell Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_ Other Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

E-mail Address: \_\_\_\_\_ @ \_\_\_\_\_

Health Insurance Plan: \_\_\_\_\_

Individual #: \_\_\_\_\_ Group #: \_\_\_\_\_

Blood Type: \_\_\_\_\_

**Emergency Contact Information:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Daytime Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_ Evening Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

Cell Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_ Other Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_

E-mail Address: \_\_\_\_\_ @ \_\_\_\_\_

**Doctors Information:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Daytime Phone: ( ) \_\_\_\_\_ - \_\_\_\_\_ Fax: ( ) \_\_\_\_\_ - \_\_\_\_\_

Disasters happen. Are you ready?

**EMERGENCY SUPPLY CHECKLIST**

Get a sturdy canvas bag or suitcase and consider filling it with the items below (essential items are starred\*):

- \* Copy of your Ready Seniors emergency information card
- \* 3-day supply of bottled water
- \* 3-day supply of food that will not go bad and is easy to carry

**Medications:**

- \* 3-day supply of prescription medicine
- \* 3-day supply of over-the-counter/nonprescription medicine

**First aid kit:**

- \* Antibiotic ointment
- \* Aspirin or non-aspirin pain reliever
- Bandages
- Scissors
- Anti-diarrhea medicine
- Antacid
- Laxative

**Personal Care:**

- \* Extra eyeglasses
- Hearing aid batteries
- Denture needs
- Toilet paper
- Contact lenses and supplies
- Soap, toothpaste, deodorant, clean hand towel

**Clothing:**

- At least one change of clothes
- Poncho or other rain gear
- Extra socks

- Cash in small bills

**Supplies:**

- \* Wind-up or battery-operated radio
- \* Flashlight and extra batteries
- Plastic garbage bags and ties
- Lightweight blanket
- Utility knife
- Matches in a waterproof container
- Paper and pencil
- Map of area
- Whistle or bell – for signaling help if needed

**Copies of important family documents in a waterproof, portable container, including:**

- Social Security card, driver license, photo IDs, passport
- Will, insurance policies, car titles, deeds, stocks, bonds
- Immunization records
- Bank account numbers
- Credit card account numbers
- Inventory of valuable household goods
- Important telephone numbers
- Family records (birth, adoption, marriage)

## Profile of Respondents (n=1496)

		%	n
<b>Gender</b>	Male	28.7	427
	Female	71.3	1063
<b>Race</b>	White	79.8	1191
	Black or African American	13.8	206
<b>Age</b>	65-70	25.7	384
	71-75	20.5	307
	76-80	23.0	344
	81 and older	30.8	461
<b>Residence</b>	Urban	74.6	1109
	Suburban	21.9	325
	Rural	3.4	51
<b>Care for grandchildren</b>	Yes	9.5	141
<b>Volunteer or work outside your home</b>	Yes	39.1	578
<b>Have a Pet</b>	Yes	41.4	612
<b>Take Prescription medicine</b>	Yes	92.2	1356

# Community Assessment for Risks during Emergencies (**CARE**) 7 domains

- Lives Alone
- Has no family member or friend to check on him/her
- Has no daily contact with neighbors
- Relies on meals brought to home
- Relies on a visiting nurse or other home care agency
- Has a serious chronic illness requiring oxygen or dialysis
- Has mobility impairment (walks with cane, walker; uses wheelchair)

# Community Assessment for Risks during Emergencies (CARE) – 7 domains (n=1496)

	%	n
Lives Alone	50.0	740
Has no family member or friend to check on him/her	27.2	402
Has no daily contact with neighbors	38.5	569
Relies on meals brought to home	11.8	173
Relies on a visiting nurse or other home care agency	14.9	220
Has a serious chronic illness requiring oxygen or dialysis	11.5	172
Has mobility impairment (walks with cane, walker, uses wheelchair)	27.3	400



# CARE Level by Emergency Preparedness (n= 1496)\*

	Care Level			Chi-square	df	Sig
	1 Low	2 Moderate	3 Priority			
Have a first aid kit	54.9% (731)	55.1% (43)	41.2% (21)	3.76	2	NS
Have 3 day food supply	83.7% (1112)	74.4% (58)	64.7% (33)	16.04	2	.000
Have manual can opener	81.0% (1077)	77.9% (60)	58.0% (29)	16.27	2	.000
Have battery operated radio	61.6% (819)	59.7% (46)	46.0% (23)	4.99	2	.082
Know to turn off electricity to home	63.7% (847)	58.4% (45)	32.0% (16)	21.0	2	.000
Know how to turn off natural gas to home	42.2% (560)	36.4% (28)	28.0% (14)	4.8	2	.089
Know how to turn off water to home	62.8% (838)	53.2% (45)	30.0% (15)	24.0	2	.000

\*All percentages adjusted for missing data

## Conclusions and areas for future research

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- Some seniors are socially isolated in that they have no family members or neighbors to check on them during times of emergency
  - of these isolated seniors, many have serious medical or mobility issues
- Implement an educational program designed to specifically train emergency/first responders around the characteristics presented in the CARE levels

## Conclusions and areas for future research

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- Study is a snap-shot of preparedness and vulnerability of older adults across the state of Ohio, yet the sample is primarily white, suburban females
  - likely under represents the vulnerability of older adults to a disaster
- Rural older adults were disproportionately the most vulnerable of all seniors in the study
  - highest proportion in the 'Priority 3' CARE level

## **Conclusions and areas for future research**

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- Assess preparedness of larger sample of rural and racial/ethnic groups using CARE tool
- Collaborate with emergency/first responders and community volunteers/organizations- 'preparedness assessment'
- Develop and implement educational intervention based on CARE tool
- Integrate a GIS component to map high CARE level older adults

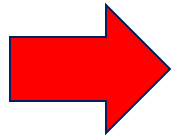
## **Pilot Demonstration Funding**

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- The Dominion Foundation

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Questions, comments, or interest in  
collaborating on future research?

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Disasters Happen:  
Are *YOU* Ready?



# How ready are we?

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- Only 3 out of every 10 Americans are prepared for an emergency (FEMA, 2006)
- Only 25% of Cities are prepared\*
- Northeast Ohio is among the least prepared areas in Ohio for maintaining communication during a disaster (*Plain Dealer, 2007*)

\*Department of Homeland Security



# At least 80% of older Americans are living with at least one chronic health condition <sup>1</sup>

- Older persons living on fixed incomes may live in older housing or in lower income communities.
- Many older persons require community support services to function independently (home-delivered meals, adult day care, home care assistance, senior centers, etc.).
- Older persons living on very low incomes may not have the resources to prepare for disasters and may not have any type of network to fall back on, or rely on, post-disaster.
- When disaster recovery services (i.e., programs and information) are not accessible or lack cultural and linguistic appropriateness, many seniors and persons with disabilities are unable to access them and therefore have greater difficulty recovering from disasters <sup>2</sup>

1: CDC. Public health and aging: trends in aging — United States and worldwide. *Morbidity and Mortality Weekly Report* 2003;52(06):101–106.

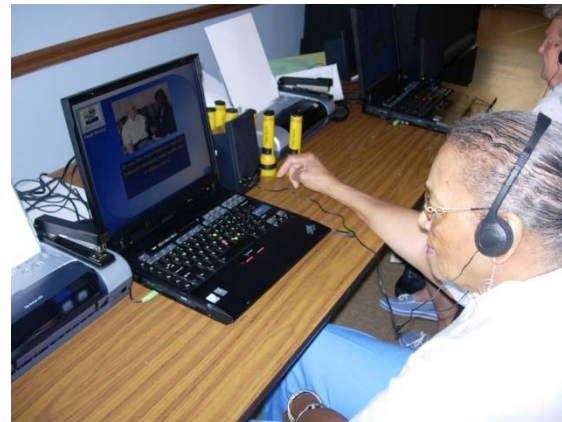
2: California Department of Aging Disaster Assistance Handbook for Area Aging Agencies and Adult Day Care Health Centers (2004)

- **Learning Objectives:**
  - Identify the level of social isolation existing among senior adults, and its subsequent impact on disaster preparedness.
  - Distinguish the variety of factors that impact senior disaster preparedness, and compare preparedness level among urban, suburban, and rural seniors.
  
- **Target Audiences:**
  - Public health practitioners and specialists working with older adults
  - Emergency responders working in disaster response
  - Community organizations and social workers working with older adult health issues

# Senior Experience

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“I am 89 and forget some things, but I liked doing this, a lot of my friends at the center talked afterwards about what they’d do in an emergency, so it made it in the top of our minds.”





## Another Senior:

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“It was very interesting. I took it very seriously and made it a point to do all of the points on my list. I feel much more prepared and safe. It's also empowering to have all of this in place-I am alone, so I have to do the best I can for myself”

## A Doctor's Observation:

One participant reported:

“I was stunned that my doctor said I was the first person to ask for an emergency supply of meds. I thought that I should give her something like the handout . . . [to] pass it out to others.”

