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Written Testimony

Before Disaster Strikes: Planning for Older Americans and People with Disabilities in All Phases of Emergencies

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Introduction

Good morning and thank you, Chairman Casey and Ranking Member Braun for having me here today. Thank you to Senator Gillibrand, from my home state of New York, for the introduction. It is an honor to testify before the committee today. This is such an important issue; I am grateful for a hearing on this topic.

My research is focused on reducing disaster vulnerabilities for our most marginalized populations in the U.S. I also look for avenues where technology is appropriately leveraged to assist in resilience or where it presents barriers. The National Science Foundation, the Department of Homeland Security, the Federal Emergency Management Agency, the State University System of New York, among others have funded my work. In the last 15 years, my research has been published in various journals covering topics on disabilities, aging, disasters, and information science. I have contributed to a number of regulatory filings focused on improving emerging messaging for people with disabilities and for individuals with English language barriers.

Issue

The most marginalized members of our society are often negatively disproportionately impacted during disasters. These populations include older adults and people with disabilities, among others. Both populations have a higher potential of living in low-income households and have limited disaster resources.³ It should be noted that many older adults also live with at least one disability.⁴ According to recent AARP and Red Cross studies, older adults are more vulnerable than other age groups.^{1–3} For

example, consider the AARP report that found older adults comprised over half of the fatalities in the following disasters:

- 50% in New Orleans following 2005 Hurricane Katrina
- 50% in the N.Y. area in Hurricane Sandy in 2012
- 60% following the Texas Winter Storm in 2021
- 70% in Florida following Hurricane Ian in 2022
- 84% in the 2018 California Camp Fire

Older adults often have situations that contribute to their vulnerability during emergencies and disasters such as living with the assistance of specialized devices, having an external caregiver, and living with a chronic health condition that needs continued treatment.⁴ Most of our studies focus on nursing homes and other congregate care facilities for older adults. We have little information about the needs or capacity of the many older adults living with a spouse or alone in the community.

Similarly, people with disabilities are also disproportionately impacted during disasters. In my own research, I have found the needs of people with disabilities absent from state-level emergency plans. Additionally, the way in which we define disaster and disability influences how people with disabilities are incorporated into disaster risk reduction efforts.

Some of the concerns for these populations are the lack of inclusion across the lifecycle of disasters, lack of understanding about social conditions that contribute to vulnerability, a focus on agent specific rather than all hazards approach, trying to change our culture of preparedness, and a dearth of sponsored research to addresses many of these concerns.

Considerations for Older Adults during Disasters

Demographics of Older Adults

The current status of many older adults is excellent. We are aging healthier, longer, and living more independently. Our older adult population is also more racially and ethnically diverse, overwhelmingly women, and is rapidly increasing. For example, my grandmother lived to be just over 96. Though her mobility slowed as she aged, her health was far superior to most in our family, without common physical ailments outside of arthritis. While this is great, we should be concerned that older adult populations are not actively included in disaster management.

In 1900, the older adult population (65 years of age or older) accounted for 4% of the U.S. population.⁵ In 2021, older adults account for nearly 17% of the U.S. population, and by 2040 they are estimated to be almost 22%.⁶ Nearly 60% of those older adults live with their spouse or partner, and 27% live alone.⁴ As of 2019, more than half of the U.S. older adult population lives in nine states: CA, FL, TX, NY, PA, OH, IL, MI, and NC. These states also have frequent natural hazards from wildfires, hurricanes, flooding, heat waves, and winter storms. There has been an increase in human-induced hazards, as well.¹

Culture of Preparedness

Our culture of disaster preparedness is more reactive than it is proactive. Legislation often lags an extreme event and is agent specific, meaning planned around specific types of disasters. However, we see similar disproportionate impacts across all hazards concerning our more vulnerable populations,

including older adults and people with disabilities. Attempts to increase preparedness among the U.S. population have largely been unsuccessful.⁸ A recent 2022 AARP study in Florida shows a reduction in preparedness levels among older adults.⁹

But this issue is broader than just one demographic; one-size fits all preparedness campaigns are unsuccessful. Many necessary changes for us to approach resiliency require that certain information and resources to meet the unique needs of different groups are available at the household level. These resources will help empower individuals to better mitigate and prepare for the hazards they may face. This will likely lead to more successful response and recovery efforts for these groups.

Social Impacts

The vulnerability of older adults is not merely the result of their pre-disaster health or direct injuries sustained. **Social factors often contribute to their increased vulnerability.** These factors include being left out of emergency planning, preparedness, response, recovery, and mitigation efforts. ^{3,10,11} Their vulnerability also includes the increased isolation that many older adults and people with disabilities face in the aftermath of a disaster. The Surgeon General has recently issued an advisory about the indirect health impacts of loneliness and isolation. ¹²

Research shows that neighbors and community members often serve as the initial first responders following disasters.¹³ Neighbors regularly check in with older adults and people with disabilities. These *social capital networks* provide resources unattained by wealth. Isolated people are less likely to seek, receive, or find appropriate resources. Without social networks, older adults and people with disabilities often face more difficulties during and after a disaster.

Sponsored Disaster Research

Federally sponsored research has underscored the importance of investments in infrastructure and, more recently, health-related medical concerns to tackle disaster preparedness. **Research should also proactively fund social, human behavioral factors, and workforce-related studies pertaining to disaster vulnerability.** Social-related research has been encouraged for some time; however, this research is often tacked onto larger projects primarily focused on engineered solutions and large secondary datasets.

The lack of human behavioral factor disaster research funding has resulted in very few academic research studies on the impacts of disasters on older adults and people with disabilities. Where these studies have occurred, the populations are often investigated as a homogenous group of people or primarily as individuals in need of caregivers or living in congregate care. With over half of the current older adult population living with a spouse or alone in the community, the true needs and capabilities of older adults remains largely understudied. To account for the social factors and change in the culture of preparedness, larger, more specific investments regarding the social impacts of disasters must be made.

The Real Emergency Access for Aging and Disability Inclusion for Disasters (REAADI for Disasters) Act (S. 1049) has the potential to focus our attention on fixing known challenges and ensuring the inclusion of older adults and people with disabilities. Furthermore, with potential investments in research centers, the REAADI for Disasters Act can fund necessary empirical studies related to the impacts of our marginalized populations during disasters.

Recommendations

We need to change how our citizenry thinks about and understands disasters. For one, disasters are not natural. The term natural disasters can be misleading – encouraging individuals to dismiss the notion that there is something they could do to reduce their risk. To empower individuals, we need to encourage people to be aware of their local hazards and to prepare for them appropriately. Given that we move around and readily visit different regions of our country, we must also encourage people to learn about the potential hazards in new areas they visit.

The whole community approach to disaster requires a **dedicated focus on building capacity**. However, we often focus on the deficiencies of our marginalized populations instead of understanding their strengths and capabilities. This leads to us talking *at people* instead of listening *to people*. This needs to change. When we do not have the appropriate trust or buy-in from community partners, we seek innovative solutions that do not adequately identify needs. For example, I have personally observed mock actors used to approximate probable concerns for people with disabilities during a large-scale hurricane shelter exercise. Having actual people with varied disabilities included in the training would be better for the workforce to improve sheltering considerations and simultaneously be enlightening for the person with a disability to better prepare for a disaster eventuality.

Our focus on deficiencies is likely related to our preconceived notions regarding aging and ability. **We must shed biases about aging and ability.** With older adults living longer, healthier, independent lives AND working well past our standard classification of 'older adult' – it is essential to consider their unique needs. Include them in developing preparedness plans, listen to their experiences, and learn from them. For example, people with disabilities have been largely ignored in disaster plans, and when they are included, it is often not because of their capabilities.

Consider the heterogeneity of these populations. Older adults are not a large group of individuals with the same need. Similarly, people with disabilities are often discussed as one homogenous group of people. However, they are of all ages and have differing abilities. Furthermore, these populations also vary in their racial, ethnic, and cultural background. This means that we must plan for and study populations factoring in that we are all not just members of one group. We need to incorporate disaster efforts that allow them to maintain their independence. Many older adults between 65 and 79 work and live independently. Not all older adults over 80 reside in nursing homes and may have informal caregivers who are their spouses of similar age or their family members. A young adult with a mobility disability will have a differing capability and need than an older adult with vision loss. For instance, in a recent study regarding the use of COVID-19 mobile applications in NY, my team found evidence that the privacy and mental health concerns surrounding the use of these apps varied by race and age, among other factors. ¹⁴

We must make **investments before a disaster occurs.** We should proactively introduce legislation to increase preparedness and our individual understanding of hazards. Additionally, these investments should follow an all-hazards approach rather than an agent specific one. The issues and lessons learned across most of our major disasters are similar. After action reports tell a particular story. Communication, coordination, community engagement, and reaching vulnerable populations are among the most significant issues. This means that sponsored studies should also focus on remedying these challenges and encourage knowledge transfer between research and workforce.

Again, thank you for inviting me to be to speak before this committee, and I welcome your questions.

References

- Red Cross. New Research: Older Adults More Vulnerable after Disasters.
 https://www.redcross.org/about-us/news-and-events/news/2020/new-research-older-adults-more-vulnerable-after-disasters.html.
- 2. AARP. The Impact of Disasters on Older Adults. *AARP* https://www.aarp.org/livable-communities/tool-kits-resources/info-2022/disaster-risks-to-older-adults.html (2022).
- 3. National Council on Disability. *The Impacts of Extreme Weather Events on People with Disabilities*. 171 https://ncd.gov/sites/default/files/NCD%20Extreme%20Weather 508.pdf (2023).
- 4. National Council on Aging. Get the Facts on Older Americans. @NCOAging https://ncoa.org/article/get-the-facts-on-older-americans (2022).
- 5. Taylor, P., Morin, R., Parker, K., Cohn, D. & Wang, W. Growing Old in America: Expectations vs. Reality. *Pew Research Center's Social & Demographic Trends Project* https://www.pewresearch.org/social-trends/2009/06/29/growing-old-in-america-expectations-vs-reality/ (2009).
- 6. Administration on Aging. 2020 Profile of Older Americans. 21 https://acl.gov/sites/default/files/aging%20and%20Disability%20In%20America/2020ProfileoIdera mericans.final_.pdf (2021).
- 7. Birkland, T. A. *After disaster: Agenda setting, public policy, and focusing events.* (Georgetown University Press, 1997).
- The US Federal Emergency Management Agency (FEMA). Building Cultures of Preparedness: Report for the Emergency Management Higher Education Community. https://training.fema.gov/hiedu/docs/latest/2019_cultures_of_preparedness_report_10.22.18%20 final.pdf (2019).
- 9. AARP. Fewer Floridians 45+ Have a Disaster Plan in Place, AARP Survey Says. *Florida* https://states.aarp.org/florida/fewer-floridians-45-have-a-disaster-plan-in-place-aarp-survey-says (2022).
- 10. Bennett, D. State emergency plans: Assessing the inclusiveness of vulnerable populations. *International Journal of Emergency Management* **7**, 100 (2010).
- 11. Bennett, D. Five years later: Assessing the implementation of the four priorities of the Sendai framework for inclusion of people with disabilities. *International Journal of Disaster Risk Science* **11**, 155–166 (2020).
- 12. Murthy, V. Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community. 82 https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf (2023).
- 13. Aldrich, D. P. & Meyer, M. A. Social Capital and Community Resilience. *American Behavioral Scientist* **59**, 254–269 (2015).
- 14. Bennett Gayle, D. M., Yuan, X. J., Dadson, Y. A. & Edwards, N. K. Contact Tracing Mobile Applications in New York: A Qualitative Study on the Use and Privacy Perceptions. *Proceedings of the 20th ISCRAM Conference* (2023).