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Improving disaster preparedness, response and recovery for older adults

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People over the age of 65 are more likely to experience casualties during natural disasters than younger adults.² In 2005 approximately half of the deaths resulting from Hurricane Katrina were among persons over the age of 75.¹ More recently, during the 2017 hurricane season, 14 residents died in a Florida nursing home after Hurricane Irma disabled the facility's air-conditioning system leading to these avoidable heat-related deaths and injuries.³

Older adults disproportionately fare worse than younger people during emergency situations due to a number of factors such as age-related changes in sensory, cognitive and functional abilities; social isolation and the lack of family or friends to assist during a disaster; and limited financial resources. Moreover, disruptions to the provision of routine medical care and chronic disease management including lack of electricity to animate life-saving equipment, medication shortages, or the lack of food and potable water, exacerbate chronic conditions and accelerate morbidity and mortality among older adults.

The severity and frequency of natural disasters in recent years, and the fragmented response to them, reveals a need to develop a national preparedness and disaster management system in the United States. One prong of a coordinated national effort to develop an effective disaster response and recovery system is to ensure that healthcare delivery organizations have policies, procedures and plans in place to mitigate the risks that older adults face in emergency situations. In an effort to promote the development of a national preparedness and disaster response system, the Centers for Medicare and Medicaid Services (CMS) enacted an *Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers* final rule in 2016. The rule outlines emergency preparedness requirements for 17

types of healthcare providers including hospitals, long-term care facilities, residential psychiatric treatment facilities and home health agencies. Moreover, provider organizations are required to implement the four elements of effective emergency preparedness: risk assessment and planning; emergency response policies and procedures; a communication plan, and staff training and testing.

Evidence informed recommendations

Members of the American Red Cross Scientific Advisory Council and the American Academy of Nursing Policy Expert Round Table on Emergency/Disaster Preparedness for Older Adults joined forces to develop a set of evidence-informed recommendations with the goal of improving emergency preparedness and disaster management policies and practices that better addresses the unique needs and situation of older adults. The group finalized its *Closing the Gaps: Advancing Disaster Preparedness, Response and Recovery for Older Adults* report in May 2019. The report outlines recommendations and interventions known to reduce adverse outcomes for older adults during and after disasters.

The recommendations were developed using a rigorous consensus decision-making process guided by a scientific review of the latest evidence, an analysis of legislation and policies on disaster preparedness and response, and consultation with experts from a variety of disciplines and sectors. The twenty-five resulting recommendations are organized across six domains to support coordinated and comprehensive action:

1. Individuals and Caregivers
2. Community Based Services and Programs
3. Healthcare Professionals and Emergency Response Personnel
4. Care Institutions and Organizations

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Table 1
Twenty-five evidence-informed interventions and recommendations for disaster preparedness, response and recovery for older adults.

Domain	Recommendations
Individuals and Caregiver	<p>Recommendation 1.1: Older adults and their caregiver(s) should be provided with easy-to-access information related to emergency/disaster preparedness and guidance on how to develop customized disaster plans.</p> <p>Recommendation 1.2: Older adults who are reliant on mobility aids should remove or minimize barriers affecting their ability to evacuate, and should take steps to ensure their safety within their surroundings.</p> <p>Recommendation 1.3: Older adults and/or their caregiver(s) should register with their local emergency response agencies, if registries for people with functional and other needs, including persons with disabilities, have been established, to better assist/support these persons during emergencies/disasters.</p> <p>Recommendation 1.4: Older adults who have a sensory impairment, such as a visual or hearing impairment, should take additional precautions to better prepare themselves to respond to emergencies/ disasters.</p> <p>Recommendation 1.5: Older adults who live with chronic health conditions should maintain a readily accessible list of their current medical conditions, treatments (medications, durable medical equipment, supplies, and other healthcare needs), health care providers, and emergency contacts including substitute decision makers (SDMs)</p> <p>Recommendation 1.6: Older adults who take medication should work with their health care providers to ensure they have access to at least a 30-day supply of medications during an emergency.</p> <p>Recommendation 1.7: Older adults, their caregivers, who are reliant on medical devices that require electricity, should ensure they have back-up power supplies in place, especially if required while sheltering-in-place.</p> <p>Recommendation 1.8: Older adults should be encouraged to continually maintain an adequate local support network that can be called upon during impending disasters and unexpected emergencies, especially if they live alone or far from relatives.</p> <p>Recommendation 1.9: Caregivers of persons with Alzheimer's Disease and Related Dementias should know how to identify signs of distress, anxiety, or confusion, and how to redirect their attention, or calm them down during these times. In addition, caregivers should be prepared to prevent wandering, and have resources to locate their care recipients if they do wander during a disaster.</p>
Community Based Services and Programs	<p>Recommendation 2.1: Accessibility to community-based programs that educate older adults and their caregivers about disasters/emergencies that affect their region and how best to prepare for and respond to them should be increased.</p> <p>Recommendation 2.2: Programs that provide essential community services, such as Meals on Wheels, and assistance with daily living assistance for older people (financial, medical, personal care, food and transportation) should develop plans and protocols related to responding adequately to the needs of their clients during emergencies/disasters.</p> <p>Recommendation 2.3: Local governments should create registries that identify their most vulnerable groups to enable emergency responders to more easily prioritize their search and rescue efforts following a disaster or emergency.</p>
Health Care Professionals and Emergency Response Personnel	<p>Recommendation 3.1: Health care professionals and emergency response personnel should receive training on providing geriatric care relevant to their discipline and how best to assist older adults and their caregivers during disasters.</p> <p>Recommendation 3.2: Health care professionals and emergency response personnel should strive to mitigate psychological distress among older patients during and after disasters by making an effort to assess the psychological well-being of older adults and provide appropriate treatments as needed.</p>
Care Institutions and Organizations	<p>Recommendation 4.1: Care institutions and organizations should include emergency/disaster preparedness and response education in their routine training courses.</p> <p>Recommendation 4.2: Additional strategies to improve the collection and transfer of identifying information and medical histories should be adopted into current standardized patient handoff procedures to better facilitate effective tracking, relocation and care of patients during a disaster.</p>
Legislation/Policy Domain	<p>Recommendation 5.1: The US Congress 2017 Bill S. 1834 "Protecting Seniors During Disasters Act" that recommends the establishment of a national advisory committee on activities related to disaster preparedness for older adults should include at least two older adults, those with geriatric care expertise and improved representation from the private sector.</p> <p>Recommendation 5.2: Agencies with the Department of Health and Human Services (HHS) should provide change-funding guidance to allow Centers for Independent Living to use their contingency funds to provide food and water to their clients during disasters.</p> <p>Recommendation 5.3: All states and/or local governments should support the implementation of tax-free emergency preparedness weekends during specific times of the year or in anticipation of a disaster. Items covered should include disaster/emergency supplies, such as batteries, portable generators, additional mobility aids (canes, walkers), hurricane shutters, rescue ladders, radios, and ice packs.</p> <p>Recommendation 5.4: The Licensure Compact that provides multi-state licenses for nurses, physicians, and emergency medical service personnel should be adopted by all states.</p> <p>Recommendation 5.5: Ensure that all persons should be able to obtain at least a 30-day supply of emergency prescription medications prior to and during a disaster.</p> <p>Recommendation 5.6: In alignment with the State of Florida's "Environmental Control for Nursing Homes Rule", all US nursing homes and assisted living facilities should be mandated to include additional contingencies in their emergency/disaster plans to ensure that, in the event of a power outage, temperatures are kept at reasonable levels to avoid the exacerbation of existing health issues among nursing home and assisted living facility residents.</p>
Research	<p>Recommendation 6.1: There is a need to prioritize the creation and funding of research efforts to better support the development of a common framework for measuring the quality and levels of disaster preparedness among care institutions, organizations and providers, community organizations, and other groups that work primarily with older adults and their caregivers during and after disasters.</p> <p>Recommendation 6.2: There needs to be a more concerted effort in utilizing outcomes from existing evidence to support the planning, design, and refinement of more evidence-informed emergency/disaster preparedness interventions, policies, and regulations in support of older adults and caregivers, as well as organizations and care providers that will be responsible for meeting their needs during and after a disaster.</p> <p>Recommendation 6.3: A network of disaster preparedness researchers to encourage partnerships in the ongoing evaluation of emergency/disaster preparedness interventions needs to be created. Network members should advocate for an increased focus on emergency/disaster preparedness research among the various societies or journals that they are members of.</p>

From: *Closing the Gaps: Advancing Disaster Preparedness, Response and Recovery for Older Adults* (2019). American Red Cross.

5. Legislation and Policy
6. Research Recommendations

The full set of recommendations is presented in [Table 1](#).

Nurses' role in disaster preparedness and response

Representing the largest segment of the U.S. healthcare workforce, nurses play a significant role in disaster preparedness and response. Because nurses interface with older adults and their caregivers across the entire continuum of care, including acute, long-term and community based settings, it is imperative that they possess evidence-based knowledge to facilitate improved health outcomes for this rapidly growing population.

Preparing older adults and their families to respond to, and recover from, natural disasters is a critical precursor to supporting resilience and well-being, while mitigating the negative impact of these events. This is particularly true in geographical regions of the country that are more prone to severe weather, where the emergent need for evacuations or sheltering-in-place are common occurrences. Therefore, the evidence-informed recommendations presented in this report can serve as the catalyst for implementation of more robust practices aimed at improving disaster care.

Due to the increased severity and occurrence of natural disasters across the U.S., the dearth of nurses certified in gerontological nursing who are prepared to meet the diverse and complex health care needs of older adults, including those in disaster related situations, continues to highlight the on-going need for

specialized disaster education and training. This issue requires immediate attention as the nation moves forward in its agenda to improve disaster preparedness, response, and recovery efforts for older adults.

NICHE is proud to endorse the recommendations in the *Closing the Gaps: Advancing Disaster Preparedness, Response and Recovery for Older Adults* report. The full report is available on the NICHE website (nicheprogram.org). The American Red Cross offers tool-kits and education guides designed to address the unique emergency preparedness needs of older adults. These materials can be found at <https://www.redcross.org/get-help/how-to-prepare-for-emergencies/seniors.html> and will be fully-updated over the next year to reflect the findings presented in the *Closing the Gaps* report.

We encourage readers to review the report recommendations and assess the extent to which these evidence-informed practices are used during their own local patient care interactions to promote a systems approach to preparing older adults and their families to improve disaster preparedness, recovery and response.

References

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