

# Tailoring Disaster and Public Health Emergency Preparedness, Response, and Recovery to the Needs of Older Adults and Disabled Americans

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CT-A2821-1

Testimony presented before the U.S. Senate Special Committee on Aging on June 15, 2023



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Published by the RAND Corporation, Santa Monica, Calif.

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*Tailoring Disaster and Public Health Emergency Preparedness, Response, and Recovery to the Needs of Older Adults and Disabled Americans*

Testimony of Mahshid Abir<sup>1</sup>  
The RAND Corporation<sup>2</sup>

Before the Special Committee on Aging  
United States Senate

June 15, 2023

**T**hank you Chairman Casey, Ranking Member Braun, and distinguished members of the committee for the opportunity today to testify on planning for older adult and disabled Americans in all phases of disasters and public health emergencies. I am a senior physician policy researcher at the RAND Corporation. In addition to being a researcher, I am a practicing emergency physician and have worked on the front line during the coronavirus disease 2019 (COVID-19) pandemic. The views I will share reflect my clinical experience in the emergency department for nearly two decades and my expertise as a health services and public health researcher with a focus on health system and community preparedness and response. This testimony will be informed by related work conducted by RAND.

I will make three points:

1. Disasters and public health emergencies disproportionately affect older adults and people with disabilities—especially those with complex medical needs.
2. There is a critical need to identify and benchmark population-specific best practices for local, state/territorial, and federal responders to ensure continuity of health and social services for older adult and disabled persons during and after disasters.

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3. There are many ways Congress could help address the specific needs of these populations in all phases of disasters and public health emergencies to protect their health and well-being.

## Disasters and Public Health Emergencies Disproportionately Affect Older Adults and People with Disabilities—Especially Those with Complex Medical Needs

On a typical day in the emergency department, many older adults and individuals with chronic disabilities present for care. Many of these patients have multiple comorbidities and long lists of medications they take daily, and some are dependent on life-sustaining medical devices. The process of getting to the emergency department can be a massive feat for these individuals—often necessitating transfer via ambulance or dependence on family, friends, or transportation services to get there. Many will arrive with a packed bag of personal belongings anticipating potential admission to the hospital. Some will be sent from nursing homes with unclear medical problems and unable to communicate their medical complaints and health care needs.

During disasters and public health emergencies, these populations' challenges seeking health care services are compounded by the uncertainties presented by these events. Disruptions in access to food, shelter, transportation, electricity, health services and medications can put older adults and people with disabilities in an even more vulnerable position. Any *one* of these disruptions can lead to acute exacerbations of chronic illnesses and the need for acute care services in the emergency department and inpatient settings that at baseline disproportionately serve these populations. Furthermore, when older adults and people with disabilities have mental health diagnoses, such disruptions—along with the potential interruption of access to their psychiatric care or medicines—can create additional obstacles for these populations.

During the COVID-19 pandemic, fear of exposure to the virus in health care settings was another barrier to seeking care among these groups—especially since some may have been immunocompromised—resulting in delays in care or untreated (*otherwise treatable*) medical conditions that led to adverse outcomes, such as strokes and heart attacks, among other acute medical conditions, and even death. Because the abovementioned vulnerabilities are common among older adults and people with disabilities, mitigation of their needs before, during, and in the aftermath of disasters and public health emergencies requires special consideration distinct from the rest of the population. However, to date, much of disaster and public health emergency preparedness, response, and recovery has taken a one-size-fits-all approach. Best practices and policies are needed that consider the specific challenges to preparedness, response, and recovery related to older adults and people with disabilities to optimize their outcomes in emergency contexts. Given that preparedness, response, and recovery is likely most challenging in the context of older adults and people with disabilities because of the intensity of their health and social services needs, framing related policies and practices around these populations is likely to improve these processes for all Americans.

In addition to older adults and people with disabilities facing exacerbated challenges during disasters and public health emergencies, the routine challenges faced by the health systems and

social services in the United States are amplified during emergencies. For example, during periods of the COVID-19 pandemic, health care workforce shortages strained emergency department and hospital capacity, and *emergency department boarding* of hospitalized patients—where admitted patients may stay in the emergency department for days waiting for an inpatient bed—worsened. Since many older adults and people with disabilities are often in need of acute care services in the emergency department and inpatient settings, strained capacity and resultant barriers to accessing health care services can adversely affect their outcomes.

## There Is a Critical Need to Identify and Benchmark Population-Specific Best Practices for Local, State/Territorial, and Federal Responders to Ensure Continuity of Health and Social Services

To optimally respond to the needs of older adults and people with disabilities when disasters and public health emergencies strike, much advance preparation is needed, including having policies and practices in place that will help both mitigate the threats posed from these events to these populations and support their recovery from such incidents once they are over.

The following steps can be taken to improve disaster preparedness for these specific populations

- Define the populations at risk and predict their specific health and social services needs under different emergency scenarios
  - A key step in preparing for addressing the needs of older adults and people with disabilities during public health emergencies and disasters is for all states, territories, and tribal governments to routinely define the size of these populations and the nature and magnitude of their health and social services needs.<sup>3</sup> Such advance knowledge based on current data can help inform resource capacity and access planning for these populations by residence location and type of public health emergency or disaster.
- Build multi-sector, multi-stakeholder resiliency networks to support older adults and people with disabilities<sup>4</sup>
  - Previous RAND work has demonstrated the importance of community resilience to disaster preparedness, response, and recovery—especially for high-risk populations.<sup>5</sup> Multi-sector resiliency networks can be developed in advance of disasters—including health and social services, faith-based, and community organizations—that are

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<sup>3</sup> Anita Chandra, Terry Marsh, Jaime Madrigano, Molly Simmons, Mahshid Abir, Edward W. Chan, Jamie Ryan, Nupur Nanda, Michelle D. Ziegler, and Christopher Nelson, *Health and Social Services in Puerto Rico Before and After Hurricane Maria: Predisaster Conditions, Hurricane Damage, and Themes for Recovery*, Homeland Security Operational Analysis Center operated by the RAND Corporation, RR-2603-DHS, 2020, [https://www.rand.org/pubs/research\\_reports/RR2603.html](https://www.rand.org/pubs/research_reports/RR2603.html).

<sup>4</sup> Regina A. Shih, Joie D. Acosta, Emily K. Chen, Eric G. Carbone, Lea Xenakis, David M. Adamson, and Anita Chandra, “Improving Disaster Resilience Among Older Adults: Insights from Public Health Departments and Aging-in-Place Efforts,” *RAND Health Quarterly*, Vol. 8, No. 1, August 2018.

<sup>5</sup> RAND Corporation, “Community Resilience,” webpage, undated, <https://www.rand.org/topics/community-resilience.html>.

educated and equipped with the needed information and resources to facilitate access to health and social services needs among older adult and disabled victims of disasters.

- Develop mechanisms for “smarter” federal funding to support the response and recovery needs of these populations<sup>6</sup>
  - During the COVID-19 pandemic, timely government funding was critical to ensuring continuity of medical operations in many hospitals and health care systems across the United States caring for the sickest and often older adult population. To collect the needed data to apply for federal relief funds, some facilities developed COVID-19–specific cost centers,<sup>7</sup> while others developed COVID-19 care–specific time-entry codes to track and report pandemic-related care.<sup>8</sup> These pandemic-related cost-tracking mechanisms helped facilitate providing the needed documentation in applications for relief funds. Implementing these and other cost-tracking strategies can be used for cost reporting both routinely and during emergency situations, which would make hospitals, health systems, and other relevant organizations more “application ready” and responsive to the needs of their patient populations.

Given finite resources, putting policies in place that facilitate the allocation of federal assistance among older adults and people with disabilities in the communities most affected by disasters and public health emergencies is critical. One way to do this is to ensure that relief funds are allocated proportional to the impact of disasters and public health emergencies on health care and social services organizations. To this end, systems may be developed to track the financial status of health and social services organizations using publicly available data. Furthermore, to ensure that relief funding across U.S. government agencies is not duplicated, interagency data-sharing and collaboration will be important. Such efforts could include the development of frequently updated systems that allow interagency data-sharing to help both the government and applicants avoid duplication of benefits. Ensuring that federal relief funds are allocated to the organizations and populations most affected by a disaster or public health emergency, and avoiding duplicate allocation of relief funds, can help decrease the likelihood of fraud and abuse while helping to direct relief funds in a fair and equitable way to individuals and communities in most need of them.

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<sup>6</sup> Mahshid Abir and Jessie Riposo, “There Are ‘Smarter’ Ways for U.S. to Fund Public Health Emergencies,” *Voices*, United Press International, December 20, 2022.

<sup>7</sup> K. Michael Nichols, “Cost Reporting in the Time of COVID-19 Could Have an Impact on Hospital Payment,” *Healthcare Financial Management Association*, September 2, 2021.

<sup>8</sup> NYC Health + Hospitals, “COVID-19 Timesheet Reimbursement Coding—Frequently Asked Questions,” ver. 1.0, April 24, 2020.

## There Are Many Ways Congress Could Help Address the Specific Needs of These Populations in All Phases of Disasters and Public Health Emergencies to Protect Their Health and Well-Being

I'll conclude with several recommendations that Congress could consider to advance the health and safety of older adult and disabled Americans during disasters and public health emergencies as follows:

### *Require Medicaid payments to Be Made Out-of-State for Older Adults and People with Disabilities During Public Health Emergencies and Disasters*

Past disasters, such as hurricanes and tornadoes, have resulted in the displacement of communities in affected areas. In many instances, such as in the aftermath of Hurricane Katrina, some affected individuals and families had to move out of state, losing access to their health care providers and insurance coverage. Inability to seek health care services and obtain needed medications due to loss of insurance coverage can have dire consequences for multiply comorbid adults and disabled individuals. Requiring Medicaid to cover health care expenses for displaced older adults and people with disabilities is a step that could help ensure continuity of care for these populations when displaced in emergency contexts.

### *Extend the Medicare 20-Percent Increase for Inpatient COVID-19 Care to All Medicare-Eligible Older Adults and People with Disabilities During Future Public Health Emergencies and Disasters*

During the COVID-19 public health emergency, the CARES Act provided for a 20-percent increase to the Inpatient Prospective Payment System Diagnosis Related Group rate for hospitalized COVID-19 patients. Congress could consider requiring a similar increase in Medicare payments for both emergency and inpatient care received by Medicare-eligible older adults and people with disabilities during future disasters and public health emergencies.

### *Require the Development of Resources and Capabilities Within Public Health Departments to Address the Needs of Older Adults and People with Disabilities*

Many public health departments do not tailor any preparedness or community resilience activities to older adults, instead focusing on preparedness for those with functional limitations or those with chronic diseases, which disproportionately do include older adults but often do not fully address their needs. Many older adults live alone, and public health departments often are not aware of where these populations reside and often do not have a mechanism to communicate preparedness, response, or recovery information to older adults. Disasters not only disrupt health care but also disrupt the services that allow older adults to live alone and in their homes and communities (such as delivered meals and in-home care). Requiring the development (and providing the funding support) of resources and capabilities within public health departments to plan for addressing the public health and social services needs of older adults can be critical to more effective preparedness, response, and recovery for this population. Engaging key stakeholders and agencies that have contact with older adults, such as in-home care, dialysis

centers, nursing homes, and hospice care, could play a larger role in helping their users prepare for disasters.

Furthermore, the upcoming reauthorization of the Pandemic and All-Hazards Preparedness Act (PAHPA) offers an opportunity to modernize preparedness and response capabilities at all levels of government.<sup>9</sup> Part of redefining our preparedness, response, and recovery framework is planning for worst-case scenarios that affect the most vulnerable in our communities—including older adults and people with disabilities.

Congress could also consider the following measures as part of the PAHPA reauthorization:

### *Conduct a National After-Action Analysis of the COVID-19 Pandemic as Part of PAHPA Reauthorization*

With the end of the emergency phase of the COVID-19 pandemic, the national pandemic plan of the future can be informed by an after-action analysis of the pandemic response that is generated based on lessons learned,<sup>10</sup> and best practices can be identified from individual after-action reports from each state, territory, and tribal government to help improve pandemic preparedness, response, and recovery for older adults and people with disabilities. This national pandemic plan would need to balance public health measures alongside other key factors, such as economic,<sup>11</sup> educational,<sup>12</sup> and other costs to society at large.<sup>13</sup> It would also need to consider strategies for consistent and more effective public communication and education along with plans to combat misinformation.<sup>14</sup> This after-action analysis could also include a careful consideration of knowledge, data, and technological gaps and evaluate the sufficiency (*and quality*) of collaboration among key response entities across the United States to inform future pandemic planning. For example, the need for collecting and analyzing a uniform set of outcome measures across all states—such as testing, hospitalizations, and mortality—in near real time to

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<sup>9</sup> Committee on Energy and Commerce, “Reps. Hudson and Eshoo Request Information in Preparation for Pandemic Bill Reauthorization,” press release, March 1, 2023; Administration for Strategic Preparedness and Response, “Pandemic and All Hazards Preparedness Act (PAHPA),” webpage, undated, <https://aspr.hhs.gov/legal/pahpa/Pages/default.aspx>.

<sup>10</sup> Mahshid Abir, “An Opportunity to Learn from Our COVID Successes and Failures,” *Governing*, April 27, 2023.

<sup>11</sup> Raffaele Vardavas, Aaron Strong, Jennifer Bouey, Jonathan William Welburn, Pedro Nascimento de Lima, Lawrence Baker, Keren Zhu, Michelle Priest, Lynn Hu, and Jeanne S. Ringel, *The Health and Economic Impacts of Nonpharmaceutical Interventions to Address COVID-19: A Decision Support Tool for State and Local Policymakers*, RAND Corporation, TL-A173-1, 2020, <https://www.rand.org/pubs/tools/TLA173-1.html>.

<sup>12</sup> RAND Education and Labor, “COVID-19 Response Survey (CRS), Spring 2020,” webpage, undated, <https://www.rand.org/education-and-labor/projects/aep/surveys/items/covid-19-response-survey-crs-spring-2020.html>; RAND Education and Labor, “COVID-19 Response Survey (CRS), Fall 2020,” webpage, undated, <https://www.rand.org/education-and-labor/projects/aep/surveys/items/covid-19-response-survey-crs-fall-2020.html>.

<sup>13</sup> “U.S. Gun Violence Increased 30% During COVID-19 Pandemic,” Penn State College of Medicine News, October 21, 2021.

<sup>14</sup> Kate Cox, Theodora Ogden, Victoria Jordan, and Pauline Paillé, *COVID-19, Disinformation and Hateful Extremism*, Commission for Countering Extremism, 2021, <https://www.gov.uk/government/publications/covid-19-disinformation-and-hateful-extremism-literature-review-report>.



track the evolution of a pandemic and adjust mitigating strategies accordingly should be considered.<sup>15</sup>

### *Invest in Identifying Effective Strategies for Load-Balancing Among Public Health and Health Care Entities*

The COVID-19 pandemic revealed the scope and scale of long-standing capacity and capabilities shortcomings in public health and health care in the United States. However, even though the pandemic affected every corner of our nation, at any given time during the declared public health emergency, there were outbreaks in some localities, while others were relatively less affected. This inconsistency in pandemic impact meant that some public health and health systems were strained for resources while others had capacity and excess resources. Evaluating policies—including incentives and disincentives—to encourage public health and health systems to collaborate and share resources during emergencies with their respective counterparts in more affected areas will be critical to ensuring the most vulnerable populations in communities across the United States—which commonly include older adults and people with disabilities—have access to needed health and social services during future public health emergencies and disasters.<sup>16</sup>

### *Invest in Developing a National All-Hazards Surveillance System*

Early detection of emerging threats that may lead to mass casualty incidents, public health emergencies, or disasters can play an important role in prevention and timely mitigation of local, state, and national events. This will require the development of a near real-time surveillance system—similar to the Centers for Disease Control and Prevention’s Nationally Notifiable Infectious Diseases and Conditions database,<sup>17</sup> which is updated weekly—with data input from every state across the country. Such a system could build on existing national databases, such as the National Emergency Medical Services Information System,<sup>18</sup> to report and track incidents of gun violence, social unrest, and weather events, among other potential threats. Such a system can incorporate the identification of the proximity of communities with high proportions of high-risk individuals—including older adults and people with disabilities—to an incident to inform mitigation strategies. Furthermore, mechanisms for outreach and communication with older

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<sup>15</sup> Mahshid Abir, Megan K. Beckett, Wenjing Huang, Hamad Al Ibrahim, Joan Chang, Florian F. Schmitzberger, Kirstin W. Scott, and Peter S. Hussey, *A Comparison of National and International Approaches to COVID-19-Related Measures*, RAND Corporation, RR-A438-1, 2021, [https://www.rand.org/pubs/research\\_reports/RRA438-1.html](https://www.rand.org/pubs/research_reports/RRA438-1.html).

<sup>16</sup> Mahshid Abir, Christopher Nelson, Edward W. Chan, Hamad Al-Ibrahim, Christina Cutter, Karishma Patel, and Andy Bogart, *Critical Care Surge Response Strategies for the 2020 COVID-19 Outbreak in the United States*, RAND Corporation, RR-A164-1, 2020, [https://www.rand.org/pubs/research\\_reports/RRA164-1.html](https://www.rand.org/pubs/research_reports/RRA164-1.html).

<sup>17</sup> Centers for Disease Control and Prevention, “Nationally Notifiable Diseases Surveillance System,” weekly tables of infectious disease data, Week 22, 2023, <https://www.cdc.gov/nndss/data-statistics/index.html>.

<sup>18</sup> National Emergency Medical Services Information System, “What Is NEMSIS?” webpage, undated, <https://nemsis.org/what-is-nemsis/>.

adults and people with disabilities (who may be isolated or have limited means of communication) could be developed as part of this system.

### *Invest in Building Health Security into Broader National Security*

Concurrent with the COVID-19 pandemic, the United States experienced wildfires in the west,<sup>19</sup> hurricanes in the south,<sup>20</sup> social unrest,<sup>21</sup> mass migration at its southern border, and many mass shootings<sup>22</sup>—each event with its own public health and national security implications. These incidents indicate a need to build robust strategies for health security within broader national security.<sup>23</sup> In 2009, the U.S. Department of Health and Human Services released the nation’s first National Health Security Strategy “to help galvanize efforts to minimize the health consequences associated with significant health incidents.”<sup>24</sup> The 2019 Worldwide Threat Assessment of the U.S. intelligence community recognized infectious diseases and climate change as threats to national and global security.<sup>25</sup> Finally, in July 2022, the U.S. Department of Homeland Security established the Office of Health Security recognizing the importance of health security to national security.<sup>26</sup> With both climate change–related and man-made disasters on the rise,<sup>27</sup> a more whole-of-government approach may be needed to concurrently consider the public health and national security risks these incidents pose for an effective response.

Inclusion of measures in PAHPA reauthorization to facilitate building health security into national security, and to evaluate and leverage current and needed assets and capabilities in the Department of Health and Human Services, Department of Homeland Security, Department of Defense, and Food and Drug Administration, could inform synergistic efforts around developing inter-operable systems across these agencies and a comprehensive health security strategy to ensure health, safety and security in the face of future crises.

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<sup>19</sup> Harvard T.H. Chan School of Public Health, “Wildfire Smoke May Have Contributed to Thousands of Extra COVID-19 Cases and Deaths in Western U.S. in 2020,” news release, August 13, 2021.

<sup>20</sup> Michael Majchrowicz, “Hurricanes Were Active, Even During Peak COVID-19 Years,” PolitiFact, October 7, 2022.

<sup>21</sup> Tim Campbell and Miha Hribernik, “A Dangerous New Era of Civil Unrest Is Dawning in the United States and Around the World,” Verisk Maplecroft, December 10, 2020.

<sup>22</sup> Lauren Mascarenhas, “Mass Shootings in the US Increased During the Coronavirus Pandemic, Study Finds,” CNN, September 16, 2021.

<sup>23</sup> Mahshid Abir and Daniel M. Gerstein, “Healthy Nation, Safe Nation: Build Health Security into National Security,” *RAND Blog*, March 17, 2023, <https://www.rand.org/blog/2023/03/healthy-nation-safe-nation-build-health-security-into.html>.

<sup>24</sup> U.S. Department of Health and Human Services, *National Health Security Strategy 2009*, December 2009.

<sup>25</sup> Daniel R. Coats, “Worldwide Threat Assessment of the US Intelligence Community,” statement for the record presented to the U.S. Senate Select Committee on Intelligence, Office of the Director of National Intelligence, January 29, 2019.

<sup>26</sup> U.S. Department of Homeland Security, “DHS Establishes New Office of Health Security,” press release, July 19, 2022.

<sup>27</sup> Faizel Patel, “Natural Disasters Set to Increase by 37% Globally by 2025—Report,” *The Citizen*, March 14, 2022; “The Tragic Effects of Man Made Disasters,” *EKU Online blog*, Eastern Kentucky University, July 28, 2020.