

# LESSON 4-9

## RECOVERY ISSUES

**Lesson:** Recovery issues

**Author:** Melen McBride, PhD, RN, FGSA  
Associate Director, Emerita  
Stanford Geriatric Education Center  
Stanford University, School of Medicine

### Intended Audience of Learners

A broad range of health professionals who may work with the older adult population.

### Competencies

This lesson supports learning related to the following competencies, with regard to *recovery issues related to caring for the geriatric population during the disaster cycle*:

Core Competencies and Subcompetencies from Walsh L, Subbarao I, Gebbie K, et al. Core competencies for disaster medicine and public health. *Disaster Med Public Health Prep*. 2012;6(1):44-52. doi: 10.1001/dmp.2012.4.

Core Competency 7.0 "Demonstrate knowledge of principles and practices for the clinical management of all ages and populations affected by disasters and public health emergencies, in accordance with professional scope of practice."

Subcompetency 7.1 "Discuss common physical and mental health consequences for all ages and populations affected by a disaster or public health emergency."

Core Competency 11.0 "Demonstrate knowledge of short- and long-term considerations for recovery of all ages, populations, and communities affected by a disaster or public health emergency."

Subcompetency 11.3 "Identify strategies for increasing the resilience of individuals and communities affected by a disaster or public health emergency."

### Learning Objectives

At the end of this lesson, the learner will be able to:

- 4-9.1 Discuss the concept of resilience as it applies to older adults in the recovery phase of disasters.
- 4-9.2 Identify strategies to enhance the health of older adults in the recovery phase of disasters that are within the learner's scope of practice as a health professional.

- 4-9.3** Create a simple zero/low-cost, short-term intervention program for a group of nonagenarians who are in a temporary general emergency shelter waiting to return to their home.

### Estimated Time to Complete This Lesson

90 minutes

### Content Outline

Module 4: Caring for older adult populations during the disaster cycle: Preparedness, response, recovery, and mitigation

Lesson 4-9: Recovery issues

- I. Background:
  - a. In 2011,<sup>1</sup> the Presidential Policy Directive 8: National Preparedness (PPD-8) was released in response to the lessons learned and insights gained from the experiences and volumes of reports generated from the September 11 disaster and subsequent major disasters, e.g., anthrax, Hurricane Katrina, Hurricane Wilma. A foundation was created for an integrated, multilayered approach to the shared responsibility of the whole community for preparing for threats and hazards that endanger the nation's security and health. Five core capabilities were identified as critical elements necessary for preparedness and resilience that would guide individuals, communities, faith-based communities, private organizations, and federal, state, and local governments achieve the National Preparedness Goals (NPGs). Success is defined as, "*A secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.*"<sup>2</sup>
  - b. The NPGs developed in September 2011 by the Department of Homeland Security consisted of 2 documents: the National Response Framework (NRF) ([http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final\\_national\\_response\\_framework\\_20130501.pdf](http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final_national_response_framework_20130501.pdf)) and the National Disaster Recovery Framework (NDRF) (<http://www.fema.gov/pdf/recoveryframework/ndrf.pdf>). For Lesson 4-9, we will focus on the recovery phase described in the NDRF. The NDRF<sup>3</sup> has 9 core principles that maximize the opportunity for success when infused into action plans. The recovery core principles are: 1) individual and family empowerment, 2) leadership and local primary, 3) pre-disaster recovery planning, 4) partnerships and inclusiveness, 5) public information, 6)

- unity of effort, 7) timeliness and flexibility, 8) resilience and sustainability, and 9) psychological and emotional recovery.
- c. Embedded in the disaster recovery core principles is the interconnectedness and multidirectionality of the post-disaster recovery process. It is a continuum that starts at pre-disaster and continues on to long-term recovery. The recovery continuum has four phases: the pre-disaster preparedness (ongoing), short-term recovery (days), intermediate recovery (weeks to months) and long-term recovery (months to years).<sup>3(p8)</sup> There are overlapping recovery activities across the continuum that could increase geriatric resilience. For example, after a disaster, to support the older adults' psychological and emotional recovery (core principle #9), counseling can begin for those who would benefit while in the short-term recovery phase. Ongoing care that includes engaging their support networks at the intermediate phase may channel energy to constructive action, and at the long-term recovery phase a follow-up referral for ongoing treatment and services may strengthen resilience and belief that a future is achievable. Figure 1 on page 8 of the NDRF has examples of activities across the recovery phases or within each phase for the recovery continuum.<sup>3</sup> It is an excellent guide to planning individual or group recovery activities during the post-disaster period when older adults and their families are looking at their immediate future and wondering how much internal resources (resilience) they have for the tasks ahead. As older adults, caregivers, and their communities attend to the tasks of re-creating their lives, returning to pre-disaster life or adapting to a permanently modified life, they would at some point seek assistance from local resources such as health and social services, housing, businesses (grocery stores, drugstores, banks, etc), systems (water, transportation, communication, law enforcement, etc), and local government to meet their needs. Local resources that are viable, ready, and resilient in every phase of the disaster recovery continuum are critical to a strong recovery among older adults, their families, and the whole community. Examples of activities for public health and health care, business, and other essential elements of disaster recovery are also presented in Figure 1 on page 8 of the NDRF.<sup>3</sup>
- d. In 2009, the US Department of Health and Human Services disseminated nationwide the first National Health Security Strategy (NHSS)<sup>4</sup> to energize efforts towards reduction of the health effects of mass disasters and to fill a gap in disaster preparedness brought on by the September 11 disasters and the devastation caused by Hurricane Katrina. While communities have responded by developing and strengthening their capabilities to reach a level of resilience needed to withstand all-hazards events, new threats to the health and security

of communities and the nation continue to evolve. Building on the progress made through the national emphasis on health security and priorities, the National Health Security Strategy and Implementation Plan, 2015-2018 (NHSS/IP) provides strategic direction of meaningful and purposeful actions that align with the vision for *"a nation that is secure and resilient in the face of diverse incidents with health consequences, with people in all communities enjoying a level of security against threats to their health and well-being."*<sup>5</sup> The NHSS/IP goal to *"strengthen and sustain communities' abilities to prevent, protect against, mitigate the effects of, respond to and recover from incidents with negative consequences"*<sup>5(p6)</sup> is supported by 5 strategic objectives. These are as follows:

1. Build and sustain healthy, resilient communities.
2. Enhance the national capability to produce and effectively use both medical countermeasures and nonpharmaceutical interventions.
3. Ensure comprehensive health situational awareness to support decision-making before incidents and during response and recovery operations.
4. Enhance the integration and effectiveness of the public health, health care, and emergency management systems.
5. Strengthen global health security.

A major challenge to disaster preparedness training and disaster management is the implied inclusivity in the whole community framework. Various health disciplines contribute knowledge and skills to the science, education, and practice of disaster management, and the overall focus for disaster management is a continuum from systems to community, family, and individual. Within these foci are populations (e.g., ethnic/racial minorities, special needs and vulnerable groups, persons with disability, veterans, LGBT communities) that add another layer of complexity for disaster planning and management. The Federal Emergency Management Agency adapted "access needs and "functional needs" as 2 broad categories of services and resources that disaster management may use to ensure that individuals and communities with these types of needs do not fall through the crack in disaster situations.<sup>6</sup> The NPG, NRF, NDRF, and NHSS/IP are guides to integrating, weaving, and blending discipline-specific expertise into an interprofessional, collaborative model that would fit into the team approach model for disaster management. The core competencies for disaster medicine and public health preparedness<sup>7</sup> were made more suitable to accommodate diverse perspectives from various health disciplines by creating questions that align with the competencies.<sup>8</sup> The

model enables a practitioner in a specific discipline to apply a question for a specific group of older adults with “access needs” or “functional needs” and contribute the information to the decision-making process to meet the need of the group.

*Community health resilience is the “ability of a community to use its assets to strengthen public health and healthcare systems and to improve the community’s physical, behavioral and social health to withstand, adapt to and recover from adversity.”<sup>5,7</sup>*

## II. Resilience

- a. A simple definition of resilience is “to spring back into shape” or “the capacity to recover quickly from difficulties.”<sup>9</sup> In a broader context, resilience is the capacity to respond and recover in interdependent systems (from a cellular to a global context) that face potential destruction from a massive-scale event such as flu pandemic, war, or natural disasters.<sup>10</sup> Specific to the individual, e.g., the older adult, geriatric resilience is the “*processes of, capacity for, or patterns of positive adaptation during or following exposure to adverse experiences that have the potential to disrupt or destroy the successful functioning or development of the person.*”<sup>10</sup>

A consensus emerged from private-public initiatives by governments (local, state, and national) with stakeholders from the global community that resilience as a tool for preparedness must be a whole community approach.<sup>11</sup> This approach is the combined effort of “private and public sector and non-profit stakeholders to identify the community’s collective needs to prepare for, respond to and recover from an emergency event, and determine what capabilities are required to be resilient in the face of all-hazards threat.”<sup>12</sup> Community health resilience is the “*ability of a community to use its assets to strengthen public health and healthcare systems and to improve the community’s physical, behavioral and social health to withstand, adapt to and recover from adversity.*”<sup>5</sup> As presented in Section I, successful recovery after a disaster is linked to 9 post-disaster recovery core principles<sup>3</sup> and 5 strategic objectives.<sup>5</sup>

- i. Evacuate or choose to shelter-in-place.
- ii. Community health resilience is the continuum of readiness, adaptability, and accountability of a community to prepare and respond with the required capacities and capabilities for every phase of all-hazards disasters.

b. Leadership and community health resilience: When post-event evacuation of Katrina survivors began, Houston, TX, was one city that received 23,000 individuals who were transported by bus to the Reliant Astrodome Complex. The Harris County Health Department collaborated with Baylor College of Medicine and Harris County Hospital District to set up a comprehensive medical unit (CMU) staffed by nurses, social workers, physicians from various disciplines, pharmacists, physical therapists, phlebotomists, and other health care professionals to handle the medical and social needs of the survivors. Of those seen at the CMU, 56% were aged 65 years and older. Many had mobility issues related to cognitive loss, vision or hearing deficits, or being very sick. There was no guidance from the disaster plan for frail elders who needed medical attention, and those who had no family or friends were at risk because of their inability to access medical services. A system was needed to expedite delivery of services and a group of providers formed a team to help the frail elders without advocates. The team was called SWiFT: Seniors Without Families Triage; a screening tool was developed to assess and identify needs or triage. The team worked together until the last frail elder had been served. Below is the SWiFT quick screening tool used on hundreds of evacuees. The team members learned on the spot about post-disaster care for frail elders.<sup>13</sup> The collaboration between 2 states, accessing transportation services, using a sports facility as an evacuation center, and providing health services through the County Health Department, County Hospital District, and a medical school is an example of successful post-disaster recovery involving vulnerable older adults. This is compelling evidence of community health resilience that also sparked the creativity of the group to invent a rapid screening tool (Table 1) to bring health care to a high-risk population. Engaging and sustaining community health resilience in the immediate and long-term post-disaster recovery process (12 months and beyond) would require multidimensional approaches.

i. **Table 1.** Post-Disaster Tool for Triaging Frail Older Evacuees

SWiFT Level Tool in the Post-Disaster Phase, Without Family or Friends		
SWiFT Level	Explanation	Post-Disaster Action
1	Cannot perform at least one basic ADL (activities of daily living: eating, bathing, dressing, toileting, walking, continence) without assistance	Immediate transfer to a location that can provide skilled or personal care (i.e., assisted living, nursing home, hospital)
2	Trouble with instrumental activities of daily living (i.e., finances, benefits management, assessing	Needs to be connected with a local aging services manager

	resources)	
3	Minimal assistance with ADL or Instrumental activities of daily living	Needs to be connected with a rescue organization service (i.e., Red Cross)

The simple 1, 2, 3 designation is easy to apply and can be used to assess the urgency of need and intervention required.

Source:

[http://assets.aarp.org/www.aarp.org/\\_articles/aboutaarp/baylor\\_best\\_practices\\_guide.pdf](http://assets.aarp.org/www.aarp.org/_articles/aboutaarp/baylor_best_practices_guide.pdf)

### III. Spirituality, rituals, and ceremonies

- a. A literature review of disaster research showed that middle-aged adults were more affected by their experience with disasters than were older adults. Despite the abundance of life challenges and disadvantages from physical and cognitive impairments, chronic pain, disruptions, and psychological losses, etc, post-disaster coping in older adults is better than in middle-aged adults.<sup>14</sup> This observation was attributed the older adults having acquired effective coping skills throughout their lifetime, which suggests that middle-aged adults have the capacity to learn more effective coping skills across the lifespan. Thus, developing good coping skills early in life would be an important component of community health resilience.
- b. In health promotion programs for optimum elder health, older adults learn coping skills. Some of these skills derive from complementary alternative medicine (CAM) which can be used to manage symptoms from multiple chronic conditions.<sup>15</sup> The National Center for Complementary Alternative Medicine defines CAM as “treatments that are not part of contemporary conventional medicine. They are used in *conjunction* with conventional medicine and alternative interventions are used *in place* of conventional intervention.”<sup>16,17</sup>
- c. Healing practices have been a part of CAM for over 3000 years, and a holistic approach to the various modalities is fundamental to the philosophy of unity and connectedness of the body, mind, and spirit. The NIH’s Complementary Alternative Medicine Program (CAMP) classifies CAM intervention modalities into: *alternative medical system* (Indian Ayurvedic Medicine, traditional Chinese Medicine, and homeopathy), *mind/body interventions* (meditation, prayer, cognitive and creative therapies), *biologically based therapies* (herbs, vitamins, food), *manipulative therapies* (massage, chiropractic medicine), and *energy therapies* (Reiki, chi gong, and magnetic fields).<sup>16</sup> CAM interventions tend to have more appeal to culturally diverse groups partly because they are usually minimally invasive, low risk, and affordable and the holistic approach

- aligns with many cultural group's health belief system,<sup>18</sup> such as focusing on the multilayered symptoms of complex chronic conditions and internal and external losses that older adults encounter in daily life. Among the positive gains from the use of CAM modalities is identifying and strengthening spiritual energy, a benefit that can help older adults during a disaster experience, especially during the immediate and long-term post-recovery phases.
- d. The wide use and popularity among older adults of CAM has been shown in the following studies: (1) a 2007 study showed that 4 out of 10 adults used at least one CAM modality in the past month;<sup>19</sup> (2) in a large sample study, 88% of the older adults aged 65 or more used CAM;<sup>20</sup> and (3) among participants aged over 50 (N=848), about 70% used at least one CAM modality, and in this group, CAM use was curative (44%) and preventive (58%).<sup>15</sup> Some CAM therapies that may strengthen older adults' resilience after a disaster are briefly discussed in this section.
  - e. Spiritual care and spirituality-oriented post-disaster programs
    - i. Leadership and long-term post-disaster community health resilience: Immediately after the September 11, 2001, disaster, faith-based organizations developed programs to assist with rescue, relief, and recovery efforts. Leaders and members of the faith communities collaborated to assist people who were impacted by the event and the disaster recovery workers. As time passed, the demands of the extensive recovery effort, the need to coordinate the numerous complex post-disaster recovery activities, and the recognition of the need for resources to be prepared for future disasters led to the formal incorporation of New York Disaster Interfaith Services (NYDIS) in 2003 as a federation of faith-based service providers and organizations. This innovative model for long-term disaster recovery evolved into a resource for training programs for members and clients to address all phases of the disaster life cycle, which includes mitigation education, preparedness training, planning, recovery, and advocacy programs. The federation serves by inspiring, connecting, and providing resources to faith communities in the city in disaster to create an urban environment of social justice. The recovery programs provided by NYDIS focus on unmet needs through client advocacy, caseworkers, clergy support groups, pastoral care, interfaith discussion groups, and other programs. These resources accommodate all religious needs and are cultural and language competent.<sup>21</sup>
  - f. Natural environment, traditions, and community healing

- i. In an e-mailed note, a neighbor described the following scenario: *“Late April 2011, just one and half months after a powerful 9.0 scaled earthquake and tsunami hit the Tohoku (north eastern) region of Japan, as many as one hundred thousand regional people visited Miharu-cho, located only 30 miles west of the crippled Fukushima-Daiichi-Nuclear-Power-Plant. The purpose for their visit was only one—to view and appreciate the beauty of the light pink-colored cherry blossoms fully bloomed over the branches of a 1,000-year-old tree called “Taki Sakura” (waterfall-like cherry blossoms). Despite a warning of possible radiation surrounding the area, these viewers were overwhelmed while seeing the cherry flowers blooming so beautifully that spring as in the previous years. Tearfully gazing at the blossoms, many senior citizens said to a news reporter that they were spiritually encouraged enough by that old cherry tree to restart their own lives under the difficult circumstances”* (M McBride, personal communication, 2011).

This moving and inspiring narrative is a reminder to health and service providers that there are elements in the natural environment with which survivors of disaster may find spiritual connectedness and personal meaning. In guiding communities to aim for greater enhancement of community health resilience, preservation of open spaces, historical structures, art, music, folksongs, books, and other representations of human existential experience are important sources of comfort, inspiration, and hope.

- g. Creative art therapy
  - i. The American Music Therapy Association defines music therapy to be the systematic use of music within a relationship between a client and professional music therapist for a specific goal that involves restoring, improving, or maintaining psychophysical, emotional, psychosocial, and neurological functions.<sup>22</sup> It is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. The power of music to reach a level of awareness and understanding when spoken words may be temporarily or permanently ineffective is commonly found in persons with dementia. Clinical studies using familiar songs have shown a positive effect on memory for association as well as mood state.<sup>23</sup> Listening to pleasing and relaxing music can help to decrease pain

experiences, induce relaxation, catch and hold attention, promote social interaction, and induce other global effects on the mental and psychological state of a person.<sup>17</sup> Active music making by sound production with vocal or breathing exercises, drumming, and song writing can be helpful emotional outlets. Passive music by listening to prerecorded music may help with relaxation, induce sleep, mask environmental sounds, or create imagery. Techniques for both active and passive music are intervention tools that disaster responders can provide for older adults in the recovery phase.

- ii. Individualized music is an evidence-based, nonpharmacologic approach to manage agitation in older persons with dementia. It is defined as music that has been integrated into the person's life and is based on personal preference.<sup>24</sup> This type of intervention uses prerecorded music from an inventory of the older person's repertoire of favorite music and songs from childhood and from any phase of the person's lifespan. In a disaster, older adults with dementia who are in a shelter are at risk of becoming agitated. Every type of disaster has numerous stimuli that are potential triggers for agitation that can escalate. The ideal time to intervene with individualized music is about 5 to 10 minutes before overt signs of agitation. Often, the primary caregiver can determine in the 24-hour period when the person usually becomes agitated, e.g., before a bath. Typical triggers are also known to the caregiver. A quiet or low activity room at home or in the evacuation shelter helps to maximize the intervention effect. The patient can listen with a headset to her or his favorite music from a small battery-operated tape recorder, portable DVD player, or iPod. Health care and social service providers who have geriatric clients or patients with dementia can work with the family or caregivers to put together a music intervention kit for home use and for the older person's preparedness go-bag. Teach the family and caregivers to prerecord the patient's favorite music, how to observe for triggers to agitation in a disaster situation, when to apply the intervention, and how to observe the effect. The intervention should be stopped if agitation increases and another activity should be substituted. Family and caregivers for persons with dementia who use this intervention at home would be an asset to disaster responders and to the staff and volunteers at evacuation centers. The mid-range theoretical foundation for individualized music includes cognitive impairment, progressively lowered stress threshold (PLST),

agitation, and individualized music. PLST is a phenomenon where a stimulus triggers the gradual onset of agitative behavior and application of individualized music stops or decreases the intensity of the agitation.<sup>24</sup> The intervention has been used in nursing homes by nursing staff and trained nursing assistants as well as by family caregivers in the home setting.

Evacuation shelters may consider partnerships with local businesses, church community groups, civic organizations, or schools on a project to include in the evacuation shelter's resource inventory equipment and a collection of popular tunes from different decades. Two or more shelter volunteers from some of the partners can be responsible for the use, storage, and security of the individualized music project. As a local project, the opportunity to get to know families who are looking after an older person who is cognitively impaired may help strengthen community health resilience.

- iii. The individualized music intervention for agitation in persons with dementia is an evidenced-based alternative approach for managing agitation. Individualized music is defined as music that has been integrated into the person's life and is based on personal preference.<sup>24</sup>

#### IV. Resources for post-disaster recovery

- a. Communication tool: The Safe and Well Website<sup>25</sup>

(<https://safeandwell.communityos.org/zf/safe/add>) is a free service via the Internet where a disaster survivor can post "Safe and Well" messages for family and friends to view. Participation is completely voluntary and the person who is registered on the site can update the entry at any time. When a family member is searching, the survivor's name, address, or phone number is needed to make the search. The information on the search result will have just the first and last name, date and time of registration, and the message(s) that the survivor allows to be viewed to describe her or his situation. To be registered with Safe and Well implies the participant agrees to the use of the posted information as entered on the site. Older adults who are relatively functionally and cognitively intact, comfortable about personal disclosure, computer literate or willing to accept help with technology, and have knowledge about where they are if they were involved in mandatory evacuation may benefit from this resource.

- b. Psychological First Aid<sup>26</sup> is an “evidence-informed” approach to reduce the initial distress from the impact of the disaster and enable short-term and long-term coping and adaptive functioning of older adults. The basic objectives are to
- Establish a human connection in a nonintrusive, compassionate manner.
  - Calm and orient emotionally overwhelmed or distraught survivors. Provide physical and emotional comfort.
  - Enhance immediate and ongoing safety.
  - Help survivors to express their specific immediate need and concerns and gather additional information as appropriate.
  - Offer practical assistance and information to help residents address their immediate needs and concerns.
  - Connect residents as soon as possible to social support networks that could include other residents, family members, friends, volunteers, and community organizations (such as Rotary, Kiwanis, etc), and spiritual support.
  - Support adaptive coping, acknowledge coping efforts and strengths, and empower and encourage survivors to take an active role in their recovery.
  - Provide information that may help residents cope effectively with the psychological impact of disasters.

The intervention meets four basic standards. They are to be

- Consistent with research on risk and resilience following trauma,
- Applicable and practical in field settings,
- Appropriate for developmental levels across the lifespan, and
- Culturally informed and delivered in a flexible manner.

Psychological First Aid is provided by teams of mental health workers and other disaster response staff as members of the disaster responders. They are distributed to a variety of response units such as responder teams, Incident Command Systems (ICS), primary and emergency health care, faith-based organizations, Community Emergency Response Teams (CERTs), Medical Reserve Corps, the Citizens Corps, and other disaster relief organizations. Many of them work in the field of behavioral health and have volunteered through their workplace or nonprofit organizations.

- c. Peer-to-Peer Disaster Relief Model: The Project Liberty Peer Initiative (PLPI)<sup>27</sup> was a post-September 11 response of the New York State Office of Mental Health (NYSOMH) to deliver free and nondiscriminatory mental health services from more than 70 individual service sites in the city. The target population was mental health consumers who had histories of trauma and psychiatric disability and were at high risk for re-traumatization or re-occurrence of post-traumatic stress symptoms. The Howie the Harp (HTH) Advocacy Center, a peer-run community organization, received funding from the Federal Emergency Management Agency (FEMA) through the NYSOMH to develop and provide a citywide program consisting of: (1) individual counseling and referral, (2) group counseling, (3) public education, and (4) a “warm line” offering telephone support, counseling, and referrals. With extensive outreach, the PLPI staff were able to connect with over 10,000 people with prior or existing mental illness. Peer service providers and peer service recipients benefitted from the program. For example, peer providers acquired skills for transitioning to another position and peer recipients learned to cope with post-disaster effects from a peer who had experience with similar issues. Although the program lasted 18 months (March 2002-August 2003), some peer providers and peer recipients banded together and developed ways to continue aspects of the program. The HTH Advocacy Center was a resource before PLPI and beyond the PLPI funding. The PLPI is a disaster relief program similar to programs after the 1995 Oklahoma City bombing and the 1998 North Ridge Earthquake in Los Angeles that effectively reached and served high-risk, underserved populations. However, the PLPI focused on people with prior or ongoing mental illness and it remains unclear how much and how long peer-provided service is necessary for this high-risk population to transition into post-disaster life.<sup>28</sup> The PLPI is included here as a reminder that post-disaster recovery services tend to have an unstable or impermanent quality along with the positive outcomes. Transition planning is an important aspect of post-disaster recovery to enable individuals, communities, and systems to move with confidence into post-disaster life. The PLPI program served as a model of non-traditional mental health services for the mental health consumer community.

### **Suggested Learner Activities for Use in and Beyond the Classroom**

1. Invite learners to work in small groups to discuss the following questions:
  - a. What constitutes resilience in older adults in the recovery phase of disasters?
  - b. What can you do as a health professional, within your scope of practice, to enhance the health of older adults in the recovery phase of disasters?

- c. How might you work interprofessionally in this effort?
- d. What information might you provide to an older adult after a disaster that could contribute to healthy resilience?

Groups then report to the full group on the results of their discussions.

2. Ask the learners to work in small groups to design a simple zero/low-cost, short-term intervention program for a group of nonagenarians who are in a temporary general emergency shelter waiting to return to their home. Groups should then describe the results of their discussions to the full group.

3. Ask learners to pick a partner and select one of the activities below:
  - a. Develop a fact sheet on safety for older adult survivors of a neighborhood fire who will be returning to their homes in a week.
  - b. Develop a list of resources for immigrant older adult survivors who are returning to their partially burned homes.
  - c. Interview a shelter manager to identify types of activities at the shelter for older adults with medical needs.

### Readings and Resources for the Learner

- Required Resources
  - *National Disaster Recovery Framework: Strengthening Disaster Recovery for the Nation*. Federal Emergency Management Agency. <http://www.fema.gov/pdf/recoveryframework/ndrf.pdf>. Published September 2011. Accessed July 29, 2015.
  - Schor K. Disaster health competencies and their application Caring for seniors. In: Cefalu CA, ed. *Disaster Preparedness for Seniors: A Comprehensive Guide for Healthcare Professionals*. New York, NY: Springer Science + Business Media; 2014. doi 10. 1007/978-1-4939-0665-9\_14
  - Andrulis DP, Siddiqui NJ, Gantner JL. Preparing racially and ethnically diverse communities for public health emergencies. *Health Affairs*. 2007;26(5):1269-1279. doi: 10. 1377/hltaff.2.5.1269. <http://content.healthaffairs.org/content/26/5/1269.full.html>.
  - Fisher D, Rote R, Miller LV, Romprey D, Filson B. Resource paper: from relief to recovery: peer support by consumers relieves the traumas of disasters and recovery from mental illness. Presented at: After the Crisis: Healing from Trauma after Disasters Expert Panel Meeting; April 24-25, 2006; Bethesda, MD.

[http://gainscenter.samhsa.gov/atc/text/papers/peer\\_support\\_paper.htm](http://gainscenter.samhsa.gov/atc/text/papers/peer_support_paper.htm). Updated July 2006. Accessed May 30, 2015.

- Supplemental Resources
  - Alzheimer's Disease and Disaster Preparedness. National Institute on Aging website.  
<http://www.nia.nih.gov/alzheimers/publication/alzheimers-disease-and-disaster-preparedness>. Last updated January 22, 2015. Accessed July 29, 2015.
  - Older adults resource collection. Substance Abuse and Mental Health Services Administration website.  
[http://archive.samhsa.gov/dtac/dbhis/dbhis\\_olderadults\\_resources.asp#response](http://archive.samhsa.gov/dtac/dbhis/dbhis_olderadults_resources.asp#response). Last updated February 24, 2014. Accessed July 29, 2015.
  - Wilken CS, Bobroff LB, Minton E. Disaster planning tips for older adults. IFAS Extension University of Florida.  
<http://edis.ifas.ufl.edu/pdf/files/FY/FY62000.pdf>. 2003. Accessed July 29, 2015.
  - Weil FD. Post-Hurricane Katrina research and recovery work. Frederick D. Weil, Department of Sociology, Louisiana State University website.  
<http://lsu.edu/fweil/KatrinaResearch.html>. Accessed July 29, 2015.
  - Guess What I Learned as a Peer Counselor: The lessons are social in nature. New York City Voices website.  
[http://www.nycvoices.org/article\\_662.php](http://www.nycvoices.org/article_662.php). Accessed July 29, 2015.

### Learner Assessment Strategies

1. Ask each learner to select a type of disaster that could occur in his or her community. Ask learners to answer the following questions:
  - a. What should health professionals in the community be focusing on related to the health of older adults in the days, months, and years after this type of disaster?
  - b. What strategies or programs can be employed prior to the disaster to enhance the health of older adults after this type of disaster?
2. Go to this link <http://www.cnn.com/2011/US/08/12/katrina.houston/>  
Read Thom Patterson's article "*Katrina evacuees shift Houston's identity*," view the video, and write a 1000 word blog on your responses to the items below.
  - a. Identify the changes experienced by the Katrina evacuees.
  - b. Describe the lingering psychological and emotional effects from Hurricane Katrina.

- c. Identify resources and activities that evacuees could access to help resolve issues in item b.
- d. Describe the coping mechanisms being used by the evacuees.
- e. Identify the services and other resources that are supporting the recovery successes of the evacuees.

If the learners wish to share their blogs, this could be a class project and the blogs could be posted on the NCDMPH website.

Reference: Patterson T. Karina evacuees shift Houston's identity. CNN website.

<http://www.cnn.com/2011/US/08/12/katrina.houston/>. Published August 12, 2011.

Accessed July 29, 2015.

### Readings and Resources for the Educators

- Required Resources
  - Schor K. Disaster health competencies and their application Caring for seniors. In: Cefalu CA, ed. *Disaster Preparedness for Seniors: A Comprehensive Guide for Healthcare Professionals*. New York, NY: Springer Science + Business Media; 2014. doi 10. 1007/978-1-4939-0665-9\_14
  - *National Health Security Strategy and Implementation Plan, 2015-2018*. Department of Health and Human Services, Assistant Secretary for Preparedness and Response.  
<http://www.phe.gov/Preparedness/planning/authority/nhss/Documents/nhss-ip.pdf>. Published 2015. Accessed July 29, 2015.
- Supplemental Resources
  - *National Disaster Recovery Framework: Strengthening Disaster Recovery for the Nation*. Federal Emergency Management Agency.  
<http://www.fema.gov/pdf/recoveryframework/ndrf.pdf>. Published September 2011. Accessed July 29, 2015.
  - Community Health Resilience Initiative online guide and toolkit. Community Health Resilience Initiative website.  
<http://communityhealthresilience.anl.gov>. Accessed July 29, 2015.
  - Masten AS, Obradovic J. Disaster preparation and recovery: lessons from research on resilience in human development. *Ecol Soc*. 2008;13(1):9.  
<http://www.ecologyandsociety.org/vol13/iss1/art9/>.
  - Fisher D, Rote R, Miller LV, Romprey D, Filson B. Resource paper: from relief to recovery: peer support by consumers relieves the traumas of disasters and recovery from mental illness. Presented at: After the

Crisis: Healing from Trauma after Disasters Expert Panel Meeting; April 24-25, 2006; Bethesda, MD.

[http://gainscenter.samhsa.gov/atc/text/papers/peer\\_support\\_paper.htm](http://gainscenter.samhsa.gov/atc/text/papers/peer_support_paper.htm). Updated July 2006. Accessed May 30, 2015.

### Sources Cited in Preparing Outline and Activities Above

1. Presidential Policy Directive / PPD-8: National Preparedness. Department of Homeland Security website. <http://www.dhs.gov/presidential-policy-directive-8-national-preparedness>. Published March 30, 2011. Accessed April 15, 2015.
2. *National Preparedness Goal*. First ed. Department of Homeland Security, Federal Emergency Management Administration. [http://www.fema.gov/media-library-data/20130726-1828-25045-9470/national\\_preparedness\\_goal\\_2011.pdf](http://www.fema.gov/media-library-data/20130726-1828-25045-9470/national_preparedness_goal_2011.pdf). Published September 2011. Accessed March 3, 2015.
3. *National Disaster Recovery Framework: Strengthening Disaster Recovery for the Nation*. Federal Emergency Management Agency. <http://www.fema.gov/pdf/recoveryframework/ndrf.pdf>. Published September 2011. Accessed July 29, 2015.
4. *The National Health Security Strategy of the United States of America*. US Department of Health and Human Services. <http://www.phe.gov/Preparedness/planning/authority/nhss/strategy/Documents/nhss-final.pdf>. Published December 2009. Accessed May 15, 2015.
5. *National Health Security Strategy and Implementation Plan, 2015-2018*. Department of Health and Human Services, Assistant Secretary for Preparedness and Response. <http://www.phe.gov/Preparedness/planning/authority/nhss/Documents/nhss-ip.pdf>. Published 2015. Accessed July 29, 2015.
6. *Guidance on Planning for Integration of Functional Needs Support Services in General Population Shelters*. Federal Emergency Management Agency. [http://www.fema.gov/pdf/about/odc/fnss\\_guidance.pdf](http://www.fema.gov/pdf/about/odc/fnss_guidance.pdf). Published November 2010. Accessed May 10, 2015.
7. Walsh L, Subbarao I, Gebbie K, et al. Core competencies for disaster medicine and public health. *Disaster Med Public Health Prep*. 2012;6(1):44-52. doi: 10.1001/dmp.2012.4
8. Schor K. Disaster health competencies and their application caring for seniors. In: Cefalu CA, ed. *Disaster Preparedness for Seniors: A Comprehensive Guide for Healthcare Professionals*. New York, NY: Springer Science + Business Media; 2014. doi 10. 1007/978-1-4939-0665-9\_14
9. Language matters. Oxford Dictionaries website. <http://www.oxforddictionaries.com/us/>;

- [http://www.oxforddictionaries.com/us/definition/american\\_english/resilience](http://www.oxforddictionaries.com/us/definition/american_english/resilience)  
. Accessed August 14, 2014.
10. Masten AS, Obradovic J. Disaster preparation and recovery: lessons from research on resilience in human development. *Ecol Soc*. 2008;13(1):9.  
<http://www.ecologyandsociety.org/vol13/iss1/art9/>.
  11. A whole community approach to emergency management: principles, themes, and pathways for action. Federal Emergency Management Agency website.  
<https://www.fema.gov/media-library/assets/documents/23781>. Published December 1, 2011. Accessed February 24, 2014.
  12. Stiefel J, Scalingi P, Raine L. Contributing to Ethnogeriatrics Health and Well Being Through Improving Community Health Resilience Capacities. Geriatric Emergency Preparedness and Response (GEPR) Webinar Series. Stanford Geriatric Education Center, School of Medicine website.  
<http://sgec.stanford.edu/events.html>. Accessed December 12, 2014.
  13. *Recommendations for Best Practices in the Management of Elderly Disaster Victims*. Baylor College of Medicine and American Medical Association.  
[http://assets.aarp.org/www.aarp.org/\\_articles/aboutaarp/baylor\\_best\\_practices\\_guide.pdf](http://assets.aarp.org/www.aarp.org/_articles/aboutaarp/baylor_best_practices_guide.pdf). Accessed August 12, 2014.
  14. Norris FH, Friedman MJ, Watson PJ, Byrne PM, Diaz E, Kaniasty K. 600,000 disaster victims spoke: 1. An empirical review of the literature, 1981-2001. *Psychiatry*. 2002;65:207-239.
  15. Montalto CP, Bhargava V, Hong, GS Use of complementary and alternative medicine by older adults: An exploratory study. *Complement Health Pract Rev*. 2006;11(1):27-46.
  16. Complementary, alternative, or integrative health: what's in a name? National Institutes of Health, National Center for Complementary and Integrative Health website. NCCIH publication no. D347.  
<http://nccam.nih.gov/health/whatiscom/>. Published October 2008. Accessed August 2, 2015.
  17. McBee L, Tomiano CN, Mandelbaum R, Mierswa TM, Sherman, A. Complementary and alternative approaches. In: Tober JA, Mierswa TM, Howe JL, eds. *Geriatric Mental Health Disaster and Emergency Preparedness*. New York, NY: Springer Publishing; 2010:213-245.
  18. Arcury TA, Suerken CK, Grzywacz JG, Bell RA, Lang W, Quandt SA. Complementary and alternative medicine use among older adults: ethnic variation. *Ethn Dis*. 2006;16(3):723-31.
  19. Barnes PN, Bloom B, Nahim RL. *Complementary and alternative medicine use among adults and children: United States, 2007*. Natl Health Stat Rep.

- 2009;12:1-24. <http://nccam.nih.gov/news/2008/nhsr12.pdf>. Accessed December 12, 2014.
20. Ness J, Cirillo DJ, Weir DR, Nisly NL, Wallace RB. Use of complementary medicine in older Americans: results from the retirement study. *Gerontologist*. 2005;45(4):516-524.
  21. Harding S. *NYDIS Manual for New York City Religious Leaders: Spiritual Care and Mental Health for Disaster Response and Recovery*. New York Disaster Interfaith Services.  
[http://www.nydis.org/nydis/downloads/manual/NYDIS\\_Disaster\\_SC-MH\\_Manual.pdf](http://www.nydis.org/nydis/downloads/manual/NYDIS_Disaster_SC-MH_Manual.pdf). Published 2007. Accessed December 12, 2014.
  22. What is music therapy? American Music Therapy Association website.  
<http://www.musictherapy.org/about/quotes/>. Accessed December 12, 2014.
  23. Blood AJ, Satorre RJ, Bermudez P, Evans AC. Emotional responses to pleasant and unpleasant music correlated with activity in paralimbic brain regions. *Nat Neurosci*. 1999;2(4):382-387.
  24. Gerdner L. Individualized music for persons with dementia [video]. Stanford Geriatric Education Center, Stanford University School of Medicine website.  
<http://sgec.stanford.edu/Individualized-Music-in-Persons-with-ADRD.html>. Published 2012. Accessed February 12, 2015.
  25. Register on the Safe and Well List. American Red Cross website.  
<https://safeandwell.communityos.org/zf/safe/add>. Accessed May 15, 2015.
  26. Brown LM, Hyer K. *Psychological First Aid: Field Operations Guide for Nursing Homes*.  
[http://www.ahcancal.org/facility\\_operations/disaster\\_planning/Documents/PsychologicalFirstAid.pdf](http://www.ahcancal.org/facility_operations/disaster_planning/Documents/PsychologicalFirstAid.pdf). Published April 2008. Accessed May 10, 2015.
  27. Hardiman ER, Jaffee EM. Outreach and peer-delivered mental health services in New York City following September 11, 2001. *Psychiatr Rehabil J*. 2008;32(2):117-123. doi: 10.2975/32.2.2008.117.123
  28. Hardiman ED, Carpenter J, Jaffee E, Gourdine DL. An Evaluation of Peer-Delivered Mental Health Disaster Relief Services in New York City. The New York State Office of Mental Health/Project Liberty.  
<https://www.power2u.org/downloads/ProjectLibertyEvaluation.pdf>. Published May 2005. Accessed May 15, 2015.