

Building Older Adults' Resilience by Bridging Public Health and Aging-in-Place Efforts

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Preface

The increasing frequency and intensity of weather-related and other disaster events combined with the growing representation of older adults in the overall population have created a new environment in which public health programs and policies will need to actively promote the resilience of the older population.

This toolkit contains information and activities that can bring together those involved in aging-in-place support and those involved in disaster resilience efforts to improve the resilience of older adults to natural and human-caused disasters.

This toolkit is accompanied by two companion documents (a report available at www.rand.org/t/RR2313 and a journal article manuscript available upon request from the authors) that provide additional background for those interested in how the toolkit was created. To inform development of this toolkit, RAND researchers conducted interviews with public health department staff, village executive directors, and age-friendly community coordinators across the country (Shih et al., 2018).

The contents of this toolkit will be of particular interest to political leaders (e.g., mayors' offices); emergency preparedness, response, and management staff; health departments at the local, state, and national levels; and leaders of age-friendly communities and villages.

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A profile of RAND Health, abstracts of its publications, and ordering information can be found at www.rand.org/health.

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Summary

The increasing frequency and intensity of weather-related and other disaster events combined with the growing representation of older adults in the overall population have created a new environment in which public health and prevention planning and programs will need to actively promote the resilience of older adults. Resilience-building efforts of public health departments to support a range of emergency response issues have not always been tailored to the needs of older adults (Shih et al., 2018). Relatedly, aging-in-place efforts (specifically, age-friendly communities and villages), which have arisen to support older adults' social, economic, and residential needs, often do not focus on aspects of resilience-building.

The goal of this toolkit is to bring together those involved in aging-in-place support and those involved in disaster resilience efforts to improve the ability of older adults to withstand and rebound from the effects of natural and human-caused disasters. The toolkit endeavors to bring together these two fields that are currently engaging in separate, yet complementary, work; to identify their shared interests and functions; and to help them plan, implement, evaluate, and improve their independent and collaborative activities designed to promote older adults' resilience.

Acknowledgments

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Abbreviations

AFC	age-friendly community
CDC	Centers for Disease Control and Prevention
LT	long term
N	never
NACCHO	National Association of County and City Health Officials
ST	short term

Chapter One. Introduction and Overview

In this chapter, we review this toolkit's intended audience, its goals and specific aims, and why it is needed. We conclude with a brief user's guide that previews the toolkit's content and provides tips for its use and navigation. We also offer a quick checklist to enable you to determine whether this toolkit is right for your work.

Goals and Specific Aims of the Toolkit

The goal of this toolkit is to improve the resilience of older adults by helping to bring together two groups that are currently implementing separate, yet complementary, work: (1) public health departments and (2) aging-in-place groups—specifically, age-friendly communities (AFCs) and villages. Public health departments are government agencies that are responsible for creating and maintaining conditions to keep people healthy. AFCs are agency collaborations at the municipal or regional level that seek to facilitate the inclusion of older adults in all aspects of community life and are supported in their planning and implementation by AARP and the World Health Organization. Villages are membership-driven grassroots nonprofit organizations that seek to help older adults age in place successfully. Villages generally cover a neighborhood or a city but, in some cases, can cover multiple adjacent counties in rural areas. More detailed definitions of each and how to locate them are available in Chapter Two. To accomplish this goal, the toolkit aims to

- orient each group to their shared interests and functions
- describe and support work that each group is already doing or could be doing to promote older adults' resilience
- provide guidance about how to evaluate and improve each group's independent and collaborative efforts to promote older adults' resilience.

Need to Build the Resilience of Older Adults

There are two important trends that make building the resilience of older adults important: changes in environmental stresses and changes in the numbers and needs of those aging in place.

As weather is becoming more unpredictable and natural disasters like hurricanes, flooding, tornadoes, and earthquakes grow in intensity and frequency, it is increasingly urgent to build resilient communities that can not only bounce back from adversity but also become better prepared to respond to future events (National Oceanic and Atmospheric Administration,

National Centers for Environmental Information, 2017; National Association of Insurance Commissioners, Center for Insurance Policy and Research, 2017). Resilient communities are those that can anticipate and successfully adapt to a range of difficulties (e.g., community violence, natural disasters, economic crises; Acosta, Chandra, and Madrigano, 2017). Building resilient communities requires both neighbor-to-neighbor reliance and strong organizational connections (**Figure 1.1**).



Figure 1.1. Building Blocks of a Resilient Community



The backbone of a resilient community is resilient individuals with the knowledge and ability to prepare for, respond to, and recover from adversity, trauma, tragedy, threats, or significant sources of stress. Links between these individuals and volunteers and organizations form the connective tissue of a resilient community. Strong organizational relationships help to weave these connections together (Chandra, Acosta, et al., 2011). When communities are unable to attend to those residents who may have multiple or special needs, it is more difficult for those communities to be resilient. When communities do not actively leverage the assets of all of their residents to help respond and recover, those communities are less resilient.

In addition to the changing disaster landscape, communities are now faced with growing numbers of older adults, as people live longer in general and as the baby boomer cohort swells the ranks of older adults. While the ability to live longer is a promising advancement, some

older adults are now living with multiple chronic conditions, limitations in activities of daily living and instrumental activities of daily living, physical and cognitive disabilities, and sensory impairments. This can make older adults particularly vulnerable to physiological and psychological stresses during natural disasters (Bei et al., 2013; Weisler, Barbee, and Townsend, 2006). Social isolation also prevents many older people from receiving warning signals or asking for help, rendering them invisible to rescue teams (Eisenman et al., 2007). Three-quarters of those who perished in Hurricane Katrina in 2005 were older than 60 (Jonkman et al., 2009). Recent wildfires in California and hurricanes in Florida have put a spotlight on the vulnerability of older adults after a series of preventable deaths (Nedelman, 2017). Most fatalities, injuries, and damage caused by natural disasters, such as floods, tornadoes, hurricanes, and earthquakes, are preventable (Fuse and Yokota, 2012). Preparing older adults for disaster response and recovery can alleviate some proportion of the physical, social, and emotional damage that occurs in these situations.

Older adults can also contribute important assets to disaster response. A 2017 qualitative study, using literature review and 17 focus groups with at-risk individuals, found that older adults contribute their experience, resources, and relationship-building capacity to prepare themselves and to support others during an emergency (Howard, Blakemore, and Bevis, 2017). Specifically, older adults both generate and mobilize social capital at a local level during a disaster.

Despite existing and useful disaster preparedness guidelines and resources for older adults, critical gaps remain in addressing the needs and leveraging the strengths of older adults (age 65 and older), a population that is expected to rise to 20 percent of the U.S. population by 2050 (Fernandez et al., 2002). A 2014 national survey of older adults found that two-thirds of the sample had no emergency plan, had never participated in any disaster preparedness educational program, and were not aware of the availability of relevant resources. More than one-third of the respondents did not have a basic supply of food, water, or medical supplies in case an emergency situation were to arise (Al-Rousan, Rubenstein, and Wallace, 2014). Such deficits could result in further decline in health status, especially in the presence of mobility and functional limitations (O'Sullivan, 2009). About 15 percent of the sample used medical devices requiring externally supplied electricity. Power interruptions could pose important adverse health effects for these individuals.

Growing proportions of older adults, coupled with today's increasing climatic and other disaster risks, point to the fact that public health and other programs need to engage in cross-sector collaboration to better identify and address the needs of older adults (Al-Rousan, Rubenstein, and Wallace, 2014). While public health departments are the government entity primarily responsible for the public's health and for responses to disasters and other stresses, their activities are not always tailored for older adults and thus may not make accommodations

for their needs. Aging-in-place efforts, including AFCs and villages (also known as senior villages), represent a promising strategy for U.S. communities and cities to support older adults' abilities to live in their own homes safely, independently, and comfortably (Centers for Disease Control and Prevention [CDC], 2009) and could contribute to the efforts of public health departments to build community resilience.

Purpose of Toolkit

This toolkit is intended to bring together public health departments and aging-in-place groups to improve the resilience of older adults in the face of emergencies or disasters. It specifically focuses on the role of AFCs and villages because these two groups represent long-standing efforts that have supported successful aging in place and are being used across the United States and globally. To inform the development of this toolkit, we interviewed 37 representatives from villages, AFCs, and public health departments to identify needs and barriers, as well as organizational and collaborative activities to promote older adults' resilience. We found that while some villages have incorporated resilience-building activities aimed at improving individuals' knowledge and ability to prepare for, respond to, or recover from a disaster, the variability is great, and it is unknown whether this actually improves the resilience of older adults in the face of a natural or man-made disaster. While a small number of the AFCs included in our interviews have wholly incorporated the critical element of resilience, the majority have not. Public health departments have a focus on building resilience of individuals with functional limitations—which includes many, but not all, older adults—but have limited collaboration with villages and AFCs. Improving this collaboration is critical to addressing three key barriers to promoting older adults' resilience, identified through our interviews. First, leveraging existing efforts across groups (e.g., having villages disseminate preparedness pamphlets from the public health department) can help address resource constraints of any one group. Second, some villages and AFCs felt that they were too busy focusing on ways to improve daily quality of life and did not have time for resilience activities. Bringing preparedness experts from the public health department to talk about how aspects of resilience-building can help improve quality of life on a daily basis (e.g., social connections) can help these groups understand that resilience activities are complementary, not in competition with activities to improve daily quality of life. Finally, public health departments and preparedness, response, and recovery staff can engage more with older adults (through AFCs and villages that have deep connections) to raise staff's awareness and improve their attention to the needs and strengths of older adults, especially those without functional limitations.

Intended Audiences

The intended audiences for this toolkit are policymakers; emergency preparedness, response, and management staff and their supervisors; health directors, commissioners of health, and other health and human services department leaders at the local, state, and federal levels; and leaders and partners involved with aging-in-place efforts (specifically AFCs and villages). These groups, which are not mutually exclusive, are depicted in **Figure 1.2**. Users interested in developing new AFCs or villages should refer to the resources on the AARP website (<https://www.aarp.org/livable-communities/network-age-friendly-communities/>; AARP, undated) and Village to Village Network website (<http://www.vtvnetwork.org>; Village to Village Network, 2017a).



Figure 1.2. Intended Audiences for This Toolkit



How the Toolkit Was Developed

Because there were no similar existing toolkits, the RAND team conducted interviews with public health department staff, village executive directors, and AFC coordinators across the country to create this toolkit. We also conducted a survey of older adults' resilience comparing older adults living in villages and those not living in villages. Findings are detailed in a journal article manuscript available upon request from the authors. The interviews provided

information about the types of resilience-building work that public health departments, villages, and AFCs are currently leading with older adults—as well as the barriers to and facilitators of these efforts—and offered insights about whether and how these groups could partner to build resilience. The survey contained measures to characterize older adults’ resilience. A detailed description of the methods and findings from the interviews and survey can be found in a companion report (Shih et al., 2018) and the journal article manuscript (available upon request from the authors), respectively.

We also based a portion of the toolkit (evaluation planner and continuous quality improvement information in **Chapter Four**) on the Getting To Outcomes approach because it is the only evidence-based model and intervention proven to increase a prevention practitioner’s ability to conduct self-evaluations. Getting To Outcomes is a set of tools, trainings, and technical assistance that builds practitioner capacity to conduct ten implementation best practices. Process evaluation, outcome evaluation, and continuous quality improvement are three of those practices that we highlight in this toolkit because they can help public health departments and aging-in-place groups to evaluate and improve their efforts to promote older adults’ resilience.

More details on the methods used to develop the toolkit can be found in the appendix.

User’s Guide

Overview of Content

The remainder of this toolkit walks users through a series of figures and tools. These figures and tools help you (the toolkit’s intended audiences) identify areas where your organization or group may have shared interests and functions with other similar or different groups, including public health departments, villages, or AFCs (**Chapter Two**); what types of activities each of these groups may already be doing to promote older adults’ resilience (**Chapter Three**); and what additional activities could be done independently or together with other organizations or groups to promote older adults’ resilience (**Chapter Three**). The toolkit concludes with guidance on how to design an evaluation to capture process, outcome, and partnership measures. These measures will help you determine whether your resilience work is achieving the desired effects. We also offer guidance on how to use evaluation findings to improve your current and future work (**Chapter Four**).

Potential Benefits

This toolkit will help you achieve the following benefits:

- Support collaboration between public health departments and the work of aging-in-place groups by clarifying their common ground.
- Promote activities to enhance older adults' resilience by building on this common ground.
- Collect and apply data to evaluate whether these efforts are effective.

The toolkit is designed to guide users through a series of sequential steps to help you identify ways to collaborate (across public health departments and aging-in-place groups) to achieve shared interests and improve older adults' resilience. Repeating the process on a regular basis will help you improve this collaborative work.

Tips for Navigating the Toolkit

This document contains several types of tools, which are marked with corresponding signposts:



Worksheets ask you to answer questions.



Checklists help direct you through the toolkit and provide guidelines to review your own work.



Tables summarize relevant research.



Figures provide a snapshot of key information in a visually appealing format.

Start Using the Toolkit

Checklist 1.1 will help you decide whether this toolkit is appropriate for your group. If the toolkit is right for you, it is time to start using it! Be sure to use the toolkit sequentially. Worksheets, tables, and figures build on previous content, informing tools in later sections of the toolkit. Starting in the middle of the toolkit (e.g., in **Chapter Three**) may require referring back to earlier chapters. Therefore, we strongly encourage users to go through the toolkit sequentially.



Checklist 1.1. Is This Toolkit Right for Me?

1. Do you represent a public health department or an aging-in-place group, such as a village or AFC?
 - ☐ Yes—This toolkit is right for you! Skip the remaining questions and proceed to the Summary section for this chapter.
 - ☐ No—This toolkit is primarily intended for individuals who are working with a public health department, a village, or an AFC. However, it does contain measures and guidance relevant to political leaders, state public health staff, and federal agencies involved with health and human services. If you are still unsure, proceed to Question 2.
2. Are you looking for ways to provide or improve access or coordination of community and health services or systems for older adults?
 - ☐ Yes—This toolkit is right for you! Suggestions for ways to collaborate to keep older adults safe and healthy through providing or improving access or coordination of community and health services or systems are covered in Chapter Two. Skip the remaining questions and proceed to the Summary section for this chapter.
 - ☐ No—Proceed to Question 3.
3. Are you looking for ways to work with others in your community to promote older adults' resilience?
 - ☐ Yes—This toolkit is right for you! Collaborations and partnered activities to promote older adults' resilience are covered in Chapter Three. Skip the remaining question and proceed to the Summary section for this chapter.
 - ☐ No—Proceed to Question 4.
4. Are you looking to measure older adults' resilience?
 - ☐ Yes—This toolkit is right for you! Measures of older adults' resilience are contained in Chapter Four.
 - ☐ No—The types of information provided in this toolkit are probably not applicable to you or your group.

Summary

This chapter described the purpose and content of this toolkit in order to help you decide whether this toolkit is appropriate for your group. This chapter also provided a brief summary of how the toolkit was developed. Now that you have read this chapter and completed **Checklist 1.1**, you should know whether this toolkit is right for you and your group. If it is, proceed to **Chapter Two**, which will help you find common ground between your group and others and identify ways to collaborate to achieve your shared interests of keeping older adults safe and healthy.

Chapter Two. Finding Common Ground: A Starting Point

Despite having disparate missions, responsibilities, and activities, public health departments, AFCs, and villages all have something in common—they are uniquely positioned to promote older adults' resilience. This chapter outlines ways in which the work of these three groups can be aligned to optimize their ability to promote resilience among older adults. An important starting point is exploring current goals and mission, as well as common activities to find areas for alignment.

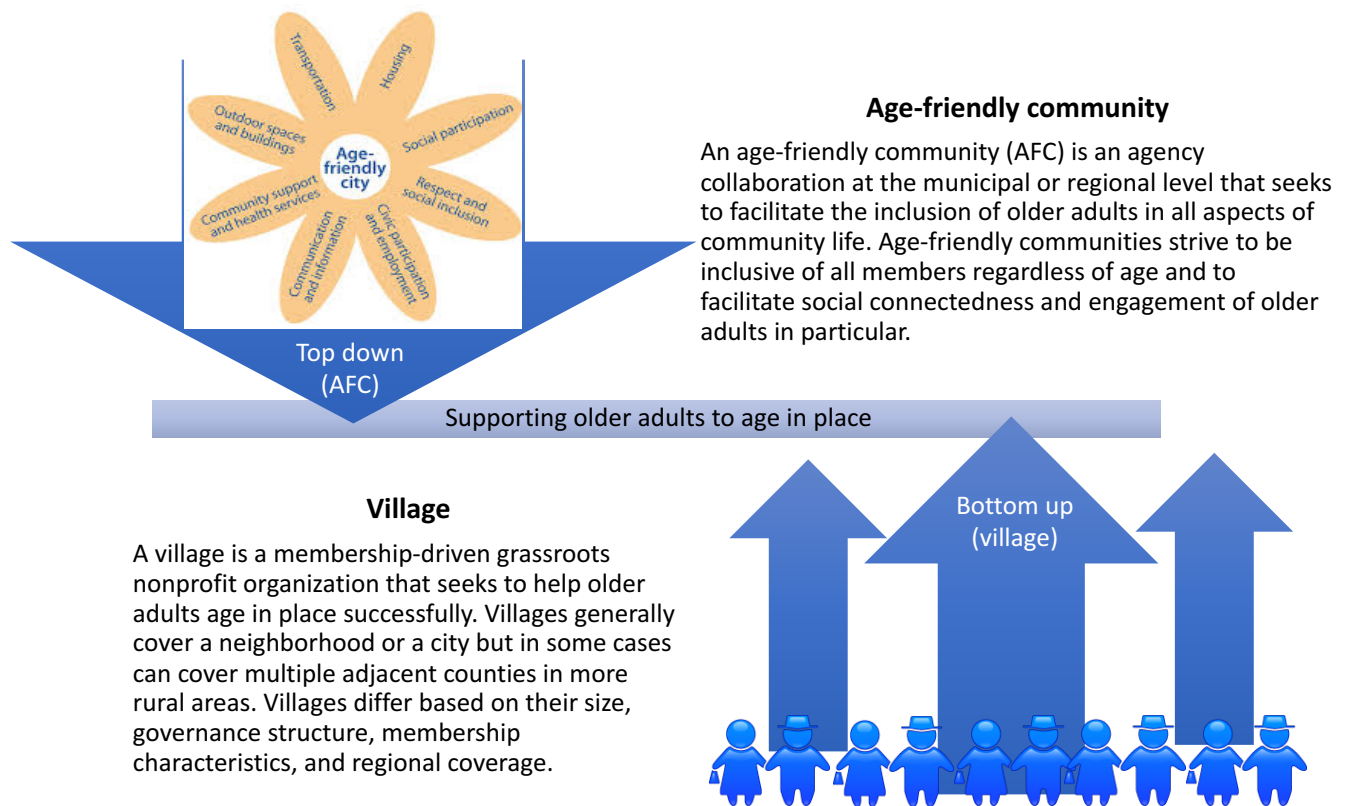
What Are the Groups That Help Support Older Adults to Age in Place?

This toolkit focuses on two specific groups that support aging in place: villages and AFCs (**Figure 2.1**). In addition to being member-driven, grassroots, and inclusive of a volunteer network, **villages** are defined by key service-delivery and support functions: coordinating access to services; providing volunteer services (such as transportation, health and wellness activities, and social activities); offering access to vetted and discounted service providers; and positively impacting isolation, interdependence, purpose, and safety of individual members. The Village to Village Network website provides more detail on the village model (http://www.vtvnetwork.org/content.aspx?page_id=22&club_id=691012&module_id=248578; Village to Village Network, 2017c).

AFCs focus on improving eight domains related to livability: outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, and community and health services. However, instead of using a service-delivery model like villages, AFCs engage in a five-year strategic planning, implementation, and evaluation process that is intended to highlight and change the environmental, economic, and social factors that influence the health and well-being of older adults. The World Health Organization oversees the Global Network for Age-Friendly Cities and Communities and tracks and disseminates information about age-friendly practices to facilitate the work of these collaborations. In the United States, the work of the World Health Organization is extended by AARP, which offers toolkits and other resources to their members in the AARP Network of Age-Friendly Communities. More details on AFCs' five-year strategic planning process can be found on AARP's website (<https://www.aarp.org/livable-communities/network-age-friendly-communities/>; AARP, undated).



Figure 2.1. Definitions of Aging-in-Place Groups



What Do Public Health Departments Do?

Public health departments are government agencies that are responsible for creating and maintaining conditions to keep people healthy. They must be aware of the specific health issues confronting the community and how environmental, social, and economic conditions affect them. In this way, public health departments can be a helpful source of information to AFCs about community conditions. Public health departments also implement health promotion programs and community engagement activities to address public health issues that may be useful to village members. Public health departments must form partnerships with public and private health care providers, community-based organizations, and other government agencies to collectively identify, alleviate, and act on the sources of public health problems—and public health departments provide expertise to others who treat or address issues of public health significance. The CDC, the largest public health agency in the United States, recently published a series of reports on the state of health, mental health, and aging in America that call for a greater emphasis on older adults' mental health, use of preventive services (such as the flu and

pneumonia vaccines), and protection during emergencies

(<https://www.cdc.gov/aging/agingdata/data-portal/mental-health.html>; CDC, 2016).

Figure 2.2 shows the ways that public health departments can impact daily life. A full operational definition of a functional public health department can be found on the National Association of County and City Health Officials (NACCHO) website

(<http://archived.naccho.org/topics/infrastructure/accreditation/OpDef.cfm>; NACCHO, 2017c).



Figure 2.2. Public Health Department Responsibilities

Public health departments impact our lives every day



SOURCE: NACCHO, 2017a, used with permission.

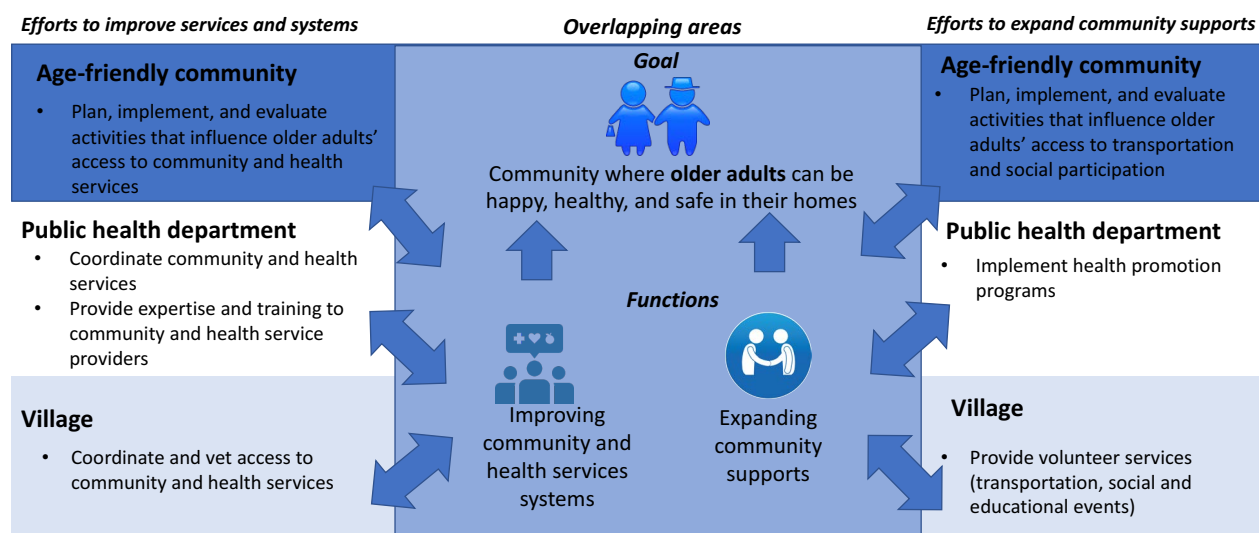
What Do These Aging-in-Place Groups and Public Health Departments Have in Common?

Both aging-in-place groups and health departments work toward creating communities where older adults can be healthy, happy, and safe in their homes. The work of AFCs and villages contributes to older adults' access to and use of preventive services, as well as their mental health (for example, through improved social participation)—both of which are important to promoting overall public health. In fact, AFCs target eight dimensions of livability (transportation, housing, social participation, respect and inclusion, civic participation and employment, communication and information, community support and health services, and

outdoor spaces and building) that all influence health, have implications for public health, and, thus, are relevant to the work of public health departments. Public health departments offer health promotion programming and coordinate community and health services that could be useful to members living in villages and should be considered when developing an AFC strategic plan. In addition, public health departments have a range of expertise (for example, in infectious disease, fall prevention, and emergency preparedness) and are tasked with sharing that expertise with community and health service providers through training or other educational events and materials. Villages have established networks and communication channels to reach older adult volunteers and members living at home—a group that is critical for public health departments and AFCs to identify and communicate with but often difficult to reach because they are diffused across their communities. These older adults can inform AFCs’ planning by providing insight about where there are limitations and needs related to older adults’ community and health services and transportation. **Figure 2.3** summarizes the overlap in key functions of each of these groups.



Figure 2.3. Overlap in Key Functions of Aging-in-Place Groups and Public Health Departments



These areas of alignment across the missions and functions of AFCs, villages, and public health departments provide a common language and purpose around which these groups can collaborate on shared issues that not only advance their own work but also create opportunities to promote older adults’ resilience.

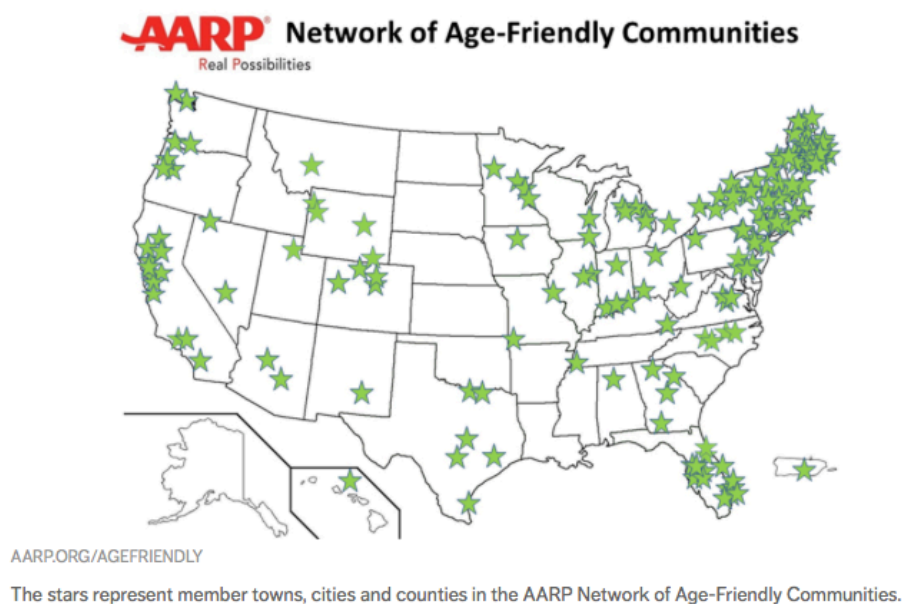
Chapter Three goes into detail on activities that each group is doing and can do to promote older adults' resilience.

How Can I Find a Group Near Me?

There are AFCs in cities and states across the United States (**Figure 2.4**). You can find an alphabetical list and an interactive map of these communities on AARP's website (<https://www.aarp.org/livable-communities/network-age-friendly-communities/info-2014/member-list.html>; AARP, 2017). For each state, there is also a phone number and email address of an AARP representative who can provide more information on the AFCs in that state.



Figure 2.4. AARP Network of Age-Friendly Communities (as of November 2017)



SOURCE: AARP, 2017.

There is also a large nationwide network of villages. The Village to Village Network website (http://www.vtvnetwork.org/content.aspx?page_id=1905&club_id=691012; Village to Village Network, 2017b) provides an interactive map that allows users to filter by state, city, zip code distance, and whether a village is currently open or still in development. The map will show you the location of villages and provide a summary box including the village name, phone number, and a link to its website (**Figure 2.5**).



Figure 2.5. Example Search Results from Village to Village Network Website

Results of Village to Village Network website search for villages in Arlington, Va.

Search Results: 1 Village(s) found

Arlington Neighborhood Village	
Location: Arlington, VA United States	Status: Open
Phone: 703-509-8057	Network Member? Yes

More Info
Website

Return to Previous Page

Village website located

Arlington Neighborhood Village
Making Arlington your home for a lifetime

HOME LEARN MORE MEMBERSHIP VOLUNTEER WHAT'S NEW DONATE CALENDAR CONTACT US

Text: Increase (+) / Decrease (-)

Search

Welcome to Arlington Neighborhood Village!

Arlington Neighborhood Village (ANV) is a volunteer-driven, non-profit organization dedicated to helping older residents of Arlington County, Virginia continue living in their own homes — safely, independently, and with an enhanced quality of life.

Since April 2014, Arlington Neighborhood Village has been serving residents throughout the county who are 55 and older. Adult volunteers of all ages provide transportation and shopping assistance, access to social and cultural activities, health and wellness programs, simple home repairs, as well as information on a host of professional and social services.

Broadening Reach And Deeper Connections

ANV's Impact Report for 2017 is available. Now more than 200 members with a 95% renewal rate, ANV's nearly 200 volunteers provide services, organize programs and activities. Funding support from two foundations attests to ANV's growing stability. It all demonstrates ANV's value to the community. Check out the full details [here](#).

SOURCE: Village to Village Network, 2017b.

Similar to villages and AFCs, public health departments also have an online directory that allows you to find a public health department and contact information (phone number and email address) using an interactive map or a zip code search (<http://archived.naccho.org/about/LHD/index.cfm>; NACCHO, 2017b). The directory, hosted by NACCHO, can be inserted as a widget on your desktop, which will automatically update the directory every time new contact information becomes available.

Summary

Congratulations, you have completed the first interactive chapter of the toolkit! This chapter provided information about what aging-in-place groups do (**Figure 2.1**), what public health departments do (**Figure 2.2**), and where these two groups have common ground or shared interests (**Figure 2.3**). The chapter ended with information about how to find groups in your area for collaboration (**Figure 2.4** and **Figure 2.5**). **Chapter Three** will provide you with guidance on how to work with these same groups to promote not only older adults' health and safety but also their resilience.

Chapter Three. Improving Older Adults' Resilience

In this chapter, we provide a summary of activities that aging-in-place groups and public health departments are already doing to promote older adults' resilience. Our interviews suggested that, in most locations, there is no agency working specifically on disaster preparedness or resilience education and outreach for older adults. However, villages, AFCs, and public health departments all reported engaging in some activities that can promote older adults' resilience (**Table 3.1, Table 3.2, Figure 3.1, Figure 3.2**).

This chapter also summarizes activities that these groups can undertake collaboratively to promote older adults' resilience (**Figure 3.3**).

What Do Villages Do That Can Promote Older Adults' Resilience?

Interviews with villages suggested that the majority of villages provided at least one activity aimed at improving the resilience of their members, ranging from educational sessions to one-on-one visits to prepare an emergency preparedness kit. The activities varied based on the needs of the village members and abilities of the village staff but could be grouped into three general approaches: (1) outreach and information-sharing by village staff and volunteers to improve members' knowledge and supports, (2) improving communication between members and first responders, and (3) working with members to assess preparedness and plans for emergencies. For each of these approaches, **Table 3.1** lists example activities being done by villages we interviewed.



Table 3.1. Example Resilience Activities Currently Being Conducted by Villages

General Approach	Example Activity
Information sharing and outreach	<ul style="list-style-type: none">• Provide brochures with information about disaster preparedness and emergency services• Call members before, during, and after disasters• Provide reminders and support to change smoke detector batteries
Improving communication with first responders	<ul style="list-style-type: none">• Assist members to enroll in Smart911 or other registries to make emergency responders aware of members' needs (e.g., Vial of Life program)• Host education sessions from local emergency response/preparedness entities• Support medical alert systems (monitors, buttons)
Assessment and planning	<ul style="list-style-type: none">• Provide home safety inspections (tripping hazards, fire safety) by villages, fire department, or another agency• Support emergency planning, including having supplies on hand and phone numbers of who to call• Support advance care planning conversations (wishes in case of a health event)

What Do Age-Friendly Communities Do That Can Promote Older Adults' Resilience?

AFCs proactively engage their members around emergency preparedness and resilience issues specifically and coordinate with partners that are directly responsible for emergency preparedness (for example, emergency managers, fire, police)—usually other municipal agencies.

An example of a city AFC is Age-Friendly DC, based in Washington, D.C. This initiative is built on an overarching policy and community engagement framework focused on a broad array of issues, including transportation, housing, health, and finances. The goal of this collective-action effort is to ensure that “all DC residents are active, connected, healthy, engaged and happy in their environment” (Age-Friendly DC, undated).

Table 3.2 contains information from the Age-Friendly DC strategic plan that outlines key goals and objectives related to preparedness and resilience. This example shows how one city is integrating resilience into usual care systems—by asking individuals to register for emergency communication and identification systems during their intake for nonemergency direct services. This example also shows the wide range of partners that can contribute to building older adults' resilience.



Table 3.2. Age-Friendly DC Strategic Plan Excerpt, Emergency Preparedness and Resilience Domain

Domain 9. Emergency Preparedness and Resilience, a DC focus: Information, education, and training to ensure the safety, wellness, and readiness of seniors in emergency situations	Lead Agency	Partners
Goal 9.1: Identify, locate, and reach special, vulnerable, and at-risk older resident populations in an emergency.		
9.1.1: Increase AlertDC, Smart911, and SmartPrepare enrollment by requiring direct service contractors and grantees to offer enrollment during the client intake process.	DCOA, DDS, DHS, DBH, DHCD, DDOE, DCHA, CFSA	OUC, HSEMA
9.1.2: Provide training on preparedness practices to shelter in place or relocate to accessible shelters when necessary.	DOH, Serve DC	DHS, DGS, ODR
Goal 9.2: Build individual and community resiliency.		
9.2.1: Develop a plan to ensure uninterrupted prescription refills to residents with chronic medical conditions in the event of an emergency.	DHCF	DOH (Board of Pharmacy)
9.2.2: Promote and support personal responsibility and first-responder opportunities for residents and neighborhoods.	EOM	
9.2.3: Create and assist community-supported neighbor-to-neighbor networks across the city that are accessible to all income levels (e.g., villages, fraternal organizations, faith-based communities, neighborhood associations).	HSEMA, DCOA, EOM	DMHHS
9.2.4: Provide guidance and require direct service contractors and grantees considered essential to develop a continuity of operations plan.	HSEMA, OCP	All agencies with direct service contracts and grants

PROGRAM DEFINITIONS: *AlertDC*: communications system that sends emergency alerts, notifications, and updates to devices; *Smart911*: can add key information about members of your household that would help first responders care for you in the event of an emergency, whether from home or mobile; *SmartPrepare*: citizens share key information with emergency responders and public health officials, allowing officials to more effectively handle complex and dynamic incidents.

AGENCY ACRONYMS: *DCOA*: DC Office on Aging; *DDS*: Department on Disability Services; *DHS*: Department of Human Services; *DBH*: Department of Behavioral Health; *DHCD*: Department of Housing and Community Development; *DDOE*: Department of Energy & Environment; *DCHA*: DC Housing Authority; *CFSA*: Children and Family Services Agency; *DOH*: Department of Health; *Serve DC*: Mayor's Office on Volunteerism; *DHCF*: Department of Health Care Finance; *EOM*: Executive Office of the Mayor; *HSEMA*: Homeland Security and Emergency Management Agency; *OCP*: Office of Contracting and Procurement; *OUC*: Office of Unified Communications; *DGS*: Department of General Services; *ODR*: Office of Disability Rights; *DMHHS*: Office of the Deputy Mayor for Health and Human Services.

Interviews with AFC coordinators also suggested that some AFCs are engaged in resilience as an extension of their work around neighborhood cohesion and social engagement. The leader of one of these AFCs, for example, described how the everyday engagement of older adults with friends, neighbors, and trusted institutions supported other agencies' resilience efforts by strengthening informal ties and building information networks. In the event of a disaster, they believed that older adults would be less isolated and more able and willing to reach out for help or follow instructions because of the AFC's social engagement efforts.

Figure 3.1. shows an example of how one AFC incorporated resilience into its social participation and inclusion work. In this example, resilience is framed as being a key outcome for the community and is linked with improved health and recreation programs.



Figure 3.1. An Excerpt from Age-Friendly Portland’s Strategic Plan Highlighting Its Resilience Work



Charge:

Portland will see a substantial increase in the population of older adults, both in size and as a percentage of the population. Properly supported, this generational shift can result in a more resilient Portland with stronger neighborhoods where people can grow up and grow old.



Recommendation:

Recreation Rx: Health programs that promote recreation should be incorporated into neighborhoods. Physical activity and recreation are important for the health of all people; older adults often lack accessible recreational opportunities and information about activities that are available. The expansion of social and recreational opportunities to engage people’s bodies and minds will keep older adults more resilient.



Implementation strategies:

Improve coordination between Portland Parks and Recreation (PP&R) and local health providers. Work with health care providers and local advocacy partners to explore and expand a scholarship program for low-income seniors. Add additional PP&R staff members to meet the demand for senior recreational services. Expand PP&R scholarship and fee-waiver budget in order to provide additional older adults with recreation opportunities. Expand age-friendly fitness centers in community centers and outdoor fitness stations in part areas. Adopt Access Recreation practices and policies that increase awareness of outdoor recreation facilities and their level of accessibility so that people can make more informed choices. Promote PP&R programming in hospitals and clinics.

SOURCE: Age-Friendly Portland and Multnomah County, 2017.

What Do Public Health Departments Do That Promotes Older Adults’ Resilience?

Findings from our interviews provided a snapshot of how public health departments promote older adults’ resilience. In most cases, public health departments do not explicitly conduct preparedness or resilience activities just for older adults, nor do they make this group a special focus of programming and planning. Public health department representatives describe their preparedness and resilience activities as having broad relevance that cuts across population groups and claim that these messages and activities do not require tailoring for older adults or other specific groups. For example, educational “lunch and learn” sessions on preparedness topics and medication-dispensing simulation exercises are noted as general-focus activities from which older adults might benefit but are not targeted specifically at older adults. Most interviewees challenge the idea that older adults are universally vulnerable and explain that many of their agencies focus on vulnerability factors (e.g., functional limitations, intellectual disabilities, medical needs, not speaking English) rather than populations defined by older age. Respondents acknowledge that while some vulnerability factors, especially around disability and medical needs, might be more common in older adults, there seems to be a

resistance to using age as a proxy for vulnerability in and of itself. **Figure 3.2** lists the most common types of activities that public health departments described as contributing to older adults' resilience. These activities are grouped by those done in partnership with older adults, those done in partnership with other organizations, and those done within the public health department.



Figure 3.2. Examples of Public Health Department Activities That Promote Older Adults' Resilience

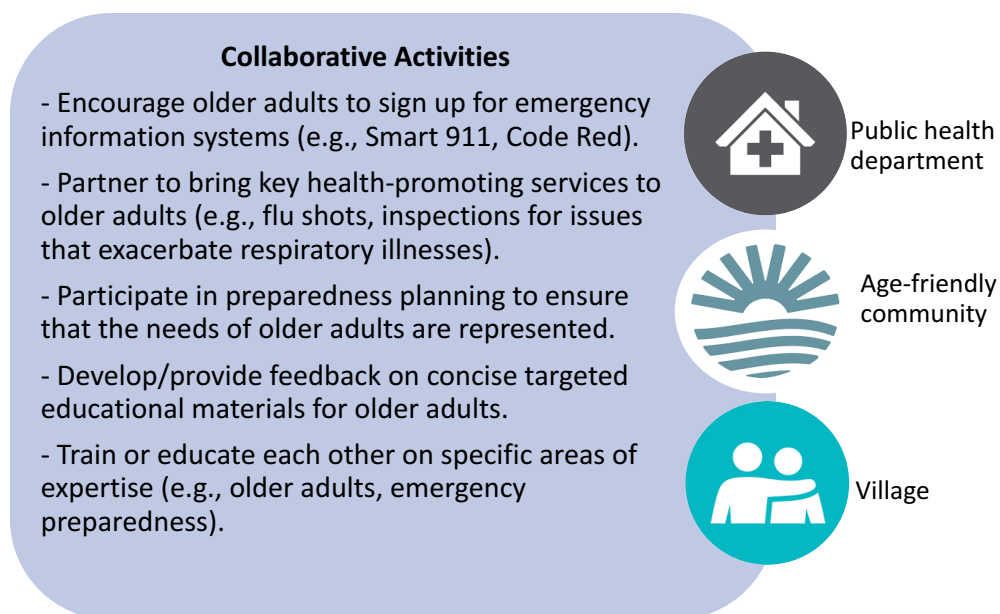
	<p>With older adults in the community:</p> <ul style="list-style-type: none"> - Conduct outreach to older adults to recruit volunteers for disaster exercises, such as a medication-dispensing exercise.
	<p>With other organizations:</p> <ul style="list-style-type: none"> - Work with long-term care facilities or other residential facilities for older adults (e.g., senior housing) to help facilities plan for emergencies or to offer preparedness education activities with residents in conjunction with the facilities. - Partner or coordinate with other health departments, Area Agencies on Aging and similar organizations, Red Cross, and other nonprofit-type organizations (such as the Alzheimer's Association) in order to distribute their preparedness messages and programming broadly, including to organizations serving older adults.
	<p>Within the public health department:</p> <ul style="list-style-type: none"> - Develop messages and activities for vulnerable groups, such as individuals with functional limitations, intellectual disabilities, or medical needs or who do not speak English (which may include older adults with specific vulnerabilities).

What Are Public Health Departments and Groups That Support Aging in Place Doing Collaboratively to Promote Older Adults' Resilience?

Our interviews suggested that there is limited collaboration between these groups. However, **Figure 3.3** summarizes some examples of activities that these groups are doing or that interviewees suggested as ways to improve their partnership. These are intended as examples and do not represent a comprehensive list of all possibilities.



Figure 3.3. Examples of Collaborative Activities to Promote Older Adults' Resilience



Given their role as a public-private agency coordinating body, AFCs are well positioned to cultivate relationships between public health departments, villages, and emergency management agencies and amplify and support ongoing efforts—rather than duplicated effort—by leveraging existing programming and expanding dissemination of other agencies' work. These types of collaborative relationships are important for villages—especially for small to mid-size villages that lack the staffing capacity or resources to design their own preparedness educational materials or curriculum. While having local preparedness partnerships and strong programming around preparedness does not guarantee uptake by village members, our interviews showed a high interest among nearly all villages related to planning for or preventing health emergency events. Encouraging older adults to *join or sign up for emergency information systems* could ensure that first responders are aware of specific needs of older adults and are able to locate and support older adults when responding to a health emergency or to a disaster.

Village members may be more motivated and willing to put time into activities they perceive as having broad applicability or multiple benefits, beyond the disaster scenario that might be easier to ignore as unlikely. Villages can be a trusted broker to connect members to other services and information and, with partners, can develop messaging that draws connections between resilience dealing with everyday stress and health-related emergency preparedness and disaster resilience. This could include *partnering to bring key health-promoting services to*

older adults. Public health departments can use flu clinics (at which flu shots are dispensed) as a way to test the processes they use to reach older adults with needed medication in the event of an infectious disease outbreak, in partnership with village members. Public health departments and AFC leadership could also coordinate to provide household inspections for issues that can exacerbate respiratory illnesses, such as asthma.

Because of their broad membership, AFCs are also well positioned as a forum for gathering *agency input on disaster plans and educational materials* developed by public health and emergency management agencies. Villages can also serve as a helpful place to gather input from older adults on the utility of materials and the feasibility of plans for communication and tracking systems for use with older adults.

To help disseminate these tracking systems, educational efforts may be needed to help older adults recognize their assets and vulnerabilities and identify areas in which they need assistance. Public health departments could provide *training or education* to village members on how to assess their assets and vulnerabilities and on available programs to improve communication with first responders about their needs. Similarly, AFCs' regular assessment of community and health services for older adults could provide useful information to inform public health departments' plans and villages' services. AFCs can provide a brief presentation tailored to the interests of public health departments and villages to further their partnership.

Ideally, public health departments, villages, and AFCs are working together seamlessly to advance their shared goal of building a community in which older adults can be happy, healthy, and safe in their homes. A strong partnership between these three groups means that they recognize each other's value, are regularly sharing information and resources, and are continually improving their own efforts and their shared efforts through input and engagement with each other and the older adults in their community.

How Can My Group Improve Older Adults' Resilience?

Use **Worksheets 3.1, 3.2, and 3.3** to identify the activities that your group is already doing independently and in collaboration with other groups in your community, as well as activities that might be of interest in the short or long term. For each activity, select whether you are doing it now (Now) or whether it is something your group would like to plan to do in the short term (ST), long term (LT), or never (N). Taking some of these simple steps can help improve the resilience of older adults in your community. Before implementing any activities, be sure to explore whether these activities might already be occurring in your community. This will help your group find the right partners and avoid any duplication of efforts.

Take the activities that you indicated your group would like to do in the short or long term and use **Worksheet 3.4** to plan more details about how your group might accomplish these

activities. There are spaces to include activities that your group can do on its own, as well as activities that can be done in collaboration with others. In the “Activity” column, list the activities that your group would like to accomplish in the short and long term. Then indicate the time frame in which you are planning on completing these activities in the “Dates (Time Frame for Completion)” column. Identify the person(s) and organization(s) responsible for the activity and the source of any resources that will be needed (for example, “We will get volunteers from the local village”) in the “Who Is Responsible” and “Where Will We Get Any Resources We Need?” columns, respectively. When the activity is complete, fill in the “Date Completed” column.



Worksheet 3.1. Resilience Activity Self-Assessment and Planning for Age-Friendly Communities

What activities is my group interested in or already doing . . .

1. on our own?	Now	ST	LT	N
• Including resilience or preparedness in the objectives, recommendations, or implementation of our age-friendly community action planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Adding a domain specifically focused on resilience or preparedness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Including local villages in community action planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Seeking input from local villages and local health departments on needs of older adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Including information on local risks and hazards related to disasters and emergencies in the context of our community action plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. with others?	Now	ST	LT	N
• Encouraging older adults to sign up for registries and emergency information systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Participating in preparedness planning to ensure that the needs of older adults are represented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Developing/providing feedback on concise targeted educational materials for older adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Training or educating each other on specific areas of expertise (e.g., older adults, emergency preparedness)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Worksheet 3.2. Resilience Activity Self-Assessment and Planning for Villages

What activities is my group interested in or already doing . . .

1. on our own?	Now	ST	LT	N
• Providing brochures with information about disaster preparedness and emergency services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Calling members before, during, and after disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Giving reminders and support to change smoke detector batteries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Assisting members to enroll in Smart911 or other registries to make emergency responders aware of members' needs (e.g., Vial of Life program)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Hosting education sessions from local emergency response/preparedness entities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Supporting use of medical alert systems (monitors, buttons)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Conducting home safety inspections (tripping hazards, fire safety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Supporting emergency planning, including having supplies on hand and phone numbers of who to call	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Supporting advance care planning conversations (wishes in the event of a health event)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. with others?	Now	ST	LT	N
• Encouraging older adults to sign up for registries and emergency information systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Participating in preparedness planning to ensure that the needs of older adults are represented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Developing/providing feedback on concise targeted educational materials for older adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Training or educating each other on specific areas of expertise (e.g., older adults, emergency preparedness)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Worksheet 3.3. Public Health Department Activity Self-Assessment and Planning

What activities is my group interested in or already doing . . .

1. on our own?	Now	ST	LT	N
• Reaching out to older adults to serve as volunteers for disaster exercises, such as a medication-dispensing exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Partnering with long-term care facilities or other residential facilities for older adults (e.g., senior housing) to help facilities plan for emergencies or to offer preparedness education activities with residents in conjunction with the facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Partnering with other health departments, Area Agencies on Aging and similar organizations, Red Cross, and other nonprofit-type organizations (such as the Alzheimer's Association) in order to distribute their preparedness messages and programming broadly, including to organizations serving older adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Developing messages and activities for vulnerable groups, such as individuals with functional limitations, intellectual disabilities, or medical needs or who do not speak English (which may include older adults with specific vulnerabilities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. with others?	Now	ST	LT	N
• Encouraging older adults to sign up for registries and emergency information systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Participating in preparedness planning to ensure that the needs of older adults are represented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Developing/providing feedback on concise targeted educational materials for older adults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Training or educating each other on specific areas of expertise (e.g., older adults, emergency preparedness)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Worksheet 3.4. Plan for Short-Term and Long-Term Resilience Activities

Activity	Dates (Time Frame) for Completion	Who Is Responsible?	Where Will We Get Any Resources We Need?	Date Completed
On our own				
1.				
2.				
3.				
With others				
4.				
5.				
6.				

Summary

This chapter provided guidance about the types of activities that villages, AFCs, and public health departments are already doing or could do to promote resilience on their own and in collaboration with each other (**Table 3.1, Table 3.2, Figure 3.1, Figure 3.2, Figure 3.3**). Now that you have completed this chapter, you should have identified present and future activities for your group (**Worksheet 3.1, Worksheet 3.2, Worksheet 3.3**) and developed a plan for how to tackle these activities in the short term and long term (**Worksheet 3.4**). **Chapter Four** will help you to assess whether your efforts to promote older adults' resilience have had the desired effects.

Chapter Four. Evaluating and Improving Your Efforts to Promote Older Adults' Resilience

This chapter provides some limited guidance on how to conduct an evaluation of your efforts to promote older adults' resilience (**Worksheet 4.1** and **Worksheet 4.2**). The chapter then walks through ways to measure potential outcomes from your group's independent and collaborative work promoting older adults' resilience (**Table 4.1** and **Table 4.2**). The chapter concludes with guidance on how to use evaluation findings to inform and improve your ongoing work (**Checklist 4.1** and **Worksheet 4.3**). This is a brief evaluation primer. More information with detailed evaluation and continuous quality improvement guidance is available online in RAND's Getting To Outcomes manuals (https://www.rand.org/pubs/technical_reports/TR101.html; Chinman, Imm, and Wandersman, 2004; and <https://www.rand.org/pubs/tools/TL179.html>; Hunter et al., 2015).

Conducting an Evaluation

A *design* is the outcome evaluation term for the type of evaluation you will conduct. The type of design guides when you collect data and from which groups. For example, a simple and inexpensive design uses a questionnaire to collect data from older adults participating in a resilience activity just before you begin and after you complete the activity (often called a *pre/post*). Another type of design called the *pre/post with comparison group* compares participating older adults with a similar group of older adults not participating in the activity during the same time period. This way, you can be sure that any changes observed in the older adults participating in the activity from pre to post were real and were not happening to all older adults (i.e., if both groups improve the same amount, then the activity did not have an effect). This evaluation design is a more rigorous way to evaluate whether the activity achieved the desired effects. However, this design is more complicated, so you may want to consult a program evaluator.

Worksheet 4.1 provides some reflection questions to consider when designing an evaluation. Answering questions about the intended timing and audience of the evaluation, and your group's evaluation expertise and available evaluation resources, is important to informing your evaluation plan. Timing of the evaluation is important—it is best to begin an evaluation prior to conducting any activity so that you can collect some data from participants prior to their involvement with the activity. Requirements of grant funding, such as the Public Health Emergency Preparedness Cooperative Agreement, or deadlines for reporting to funders, boards, or other oversight bodies may also drive evaluation timing. Answering the questions in

the “Timing of Evaluation and Intended Audience” section will help inform your decisions about evaluation timing. Finally, all evaluations require resources (e.g., staff expertise to conduct the evaluation, money for a survey). Answering the questions in the “Evaluation Expertise and Available Evaluation Resources” section will help you understand the resources your group has and might need in order to conduct an evaluation. If your group does not have evaluation expertise or established relationships with organizations that can provide evaluation expertise, you might consider engaging an external evaluator to help support your evaluation efforts. The American Evaluation Association provides a searchable database of members available for evaluation consulting (<http://www.eval.org/p/cm/ld/fid=108A>; American Evaluation Association, undated). It is important to seek evaluation expertise while planning an evaluation.

Worksheet 4.2 provides an updated planning template (updated from **Worksheet 3.4**) in which you can include a brief summary of your evaluation plan for each activity. Next to “Sample,” specify the target population and estimated number of program participants for the evaluation. Next to “Data Collection,” specify the timing of your evaluation (the dates the evaluation will occur, which should be tied to the beginning and end of the activity). Next to “Measures,” specify any measures you plan to use. These could include the process or outcome measures described in Table 4.1 and Table 4.2. Be sure to update the “Where Will We Get Any Resources We Need?” column to include any expertise, supplies, or equipment (for example, access to computers); staff time; financial resources (for example, money to support an online survey subscription); and organization resources (for example, buy-in from leadership) that might be needed for the evaluation.



Worksheet 4.1. Issues to Consider for My Evaluation

Reflect on the questions below; they lay out some key issues that you will need to consider when designing your evaluation.

Timing of Evaluation and Intended Audience

When does your evaluation need to be completed?

Does the activity have a specific end date?

Is the activity cyclical (for example, runs for eight weeks twice a year)?

If yes, when is the next time the activity will be occurring?

If no, for how long has the activity been running?

How will evaluation data be used?

Evaluation Expertise and Available Evaluation Resources

Does anyone involved with the activity have evaluation expertise?

Does the activity involve any organizations with evaluation expertise?

What kinds of resources does your group have to support an evaluation?

What other resources are available in your community to support the evaluation?



Worksheet 4.2. Updated Plan for Short-Term and Long-Term Resilience Activities

Activity	Dates (Time Frame) for Completion	Who Is Responsible?	Where Will We Get Any Resources We Need?	Date Completed	Evaluation Plan
On our own					
1.					Sample: Data Collection: Measures:
2.					Sample: Data Collection: Measures:
3.					Sample: Data Collection: Measures:
With others					
4.					Sample: Data Collection: Measures:
5.					Sample: Data Collection: Measures:
6.					Sample: Data Collection: Measures:

Outcome and Process Measures

There are a variety of measures that can be used to capture older adults' resilience. We highlight a select set of measures that we used in a recent study of villages' impact on older adults' resilience (see journal article manuscript, available from the authors). These measures capture factors related to older adults' resilience in four areas: disaster preparedness, physical health, emotional health, and social health (**Table 4.1**). When selecting specific measures, you must consider how these measures align with activities (e.g., do you expect a change in these measures based on the specific activities your group is performing?). For example, if your group is providing targeted educational materials to improve older adults' disaster preparedness, then you could use the disaster preparedness measures. See **Table 4.1** for examples of the types of activities that you could use each measure to evaluate.

In addition to aligning measures with the specific activities, you will also need to consider how the measures will be collected (timing, frequency, and person responsible), how the data from these measures will be analyzed, and what resources and expertise will be needed to understand and apply any findings. Collecting these outcome measures will allow you to answer important questions about whether your work is having the desired effect.



Table 4.1. Survey Questions to Measure Older Adults' Resilience

Area	Sample Activity	Measurement Domain	Questions	Response Options	References
Disaster preparedness	Disseminate targeted preparedness educational materials to older adults	Preparedness knowledge	<ul style="list-style-type: none"> • I am knowledgeable about local emergency plans for my community • I know the evacuation route to take in the event of an emergency • I know how to get information in an emergency • I know what supplies I need to securely seek shelter for up to 72 hours • I could help my neighbor, if he or she needed it, during a disaster 	Strongly agree to strongly disagree	Chandra, Williams, et al., 2013
	Train older adults in emergency preparedness planning or processes	Preparedness behaviors	<p>In the past 12 months I have...</p> <ul style="list-style-type: none"> • Participated in a neighborhood or community meeting about emergency preparedness • Been trained in how to help my neighborhood or my neighbor in responding to an emergency • Put together a household preparedness kit • Worked with people in my neighborhood to develop a community emergency plan (e.g., call-down lists, storing resources) • Attended training in psychological first aid or other type of training related to dealing with emotional stress of disasters • Identified where individuals who need extra help in a disaster may live • Put together a 3-day supply of prescription medications to use during an emergency • Signed up to be part of a Smart911 program • Signed up to receive government alerts during an emergency 	Yes, No, Don't know	Chandra, Williams, et al., 2013
	Host an event where older adults can meet supporting organizations' representatives in their community	Local supports	<ul style="list-style-type: none"> • Do you belong to a community organization (e.g., school, church or other faith community, or volunteer organization) that you can depend on in a disaster? • Could you call upon one of your neighbors to assist you in an emergency, such as providing food, transportation, or help with your children? 	Yes, No, Don't know	Chandra, Williams, et al., 2013
Physical health	Conduct a training on the importance of and process for accessing primary care providers to maintain health	Access to care	Is there a place you USUALLY go when you are sick or need advice about your health?	Yes, There is NO place, There is MORE THAN ONE place, Refused, Don't know	Blewett et al., 2008
			What kind of place do you USUALLY go when you are sick or need advice about your health?	Don't get care anywhere, Clinic or health center, Doctor's office or HMO,	Blewett et al., 2008

Area	Sample Activity	Measurement Domain	Questions	Response Options	References
				Hospital emergency department, Some other place, Don't go to one place most often, Refused	
			Is that [fill in response from question above] the same place you USUALLY go when you need routine or preventive care, such as a physical examination or check up?	Yes, No, Refused, Don't know	Blewett et al., 2008
		Recent care visit	About how long has it been since you last saw or talked to a doctor or other health care professional about your own health? Include doctors seen while a patient in a hospital.	Never, 6 months or less, More than 6 months but not more than 1 year ago, More than 1 year but not more than 2 years ago, More than 2 years but not more than 5 years ago, More than 5 years ago, Refused, Don't know	Blewett et al., 2008
Emotional health	Deliver an educational program on emotion and coping	Active coping	<p>These questions ask about what YOU usually do when YOU experience a stressful event.</p> <ul style="list-style-type: none"> I concentrate my efforts on doing something about it I take additional action to try to get rid of the problem I take direct action to get around the problem I do what has to be done, one step at a time 	Strongly agree, Moderately agree, Neither agree nor disagree, Moderately disagree, Strongly disagree	Diener et al., 2010
		Emotional well-being	<ul style="list-style-type: none"> I lead a purposeful and meaningful life My social relationships are supportive and rewarding I am engaged and interested in my daily activities I actively contribute to the happiness and well-being of others I am competent and capable in the activities that are important to me I am a good person and live a good life My material life (income, housing, etc.) is sufficient for my needs I generally trust others and feel part of my community I am satisfied with my religious or spiritual life 	Strongly agree, Moderately agree, Neither agree nor disagree, Moderately disagree, Strongly disagree	Diener et al., 2010

Area	Sample Activity	Measurement Domain	Questions	Response Options	References
			<ul style="list-style-type: none"> I am optimistic about the future I have no addictions, such as to alcohol, illicit drugs, or gambling People respect me 		
Social health	Conduct social engagement efforts where older adults get to know their neighbors and each other	Social disconnectedness	Approximately how many people do you know with whom you can discuss important matters?	None, One or two, Three to five, Six to ten, More than ten, Don't know	Suzman, 2009
			<p>In the <u>past two months</u>...</p> <ul style="list-style-type: none"> about how often did you talk with one or more of these individuals (by phone, email, or in person)? 	Several times a week, About once a week, About once a month, Less than once a month, Never	
			<p>Approximately how many friends would you say you have?</p> <p>In the <u>past two months</u>...</p> <ul style="list-style-type: none"> about how often did you get together socially with friends or neighbors? how often did you attend meetings of any organized group? (such as a choir, a committee or board, a support group, a sports or exercise group, a hobby group, or a professional society) how often did you do volunteer work for religious, charitable, political, health-related, or other organizations? 	None, One or two, Three to five, Six to ten, More than ten, Don't know	Suzman, 2009
		Social isolation	<p>In the <u>past two months</u>...</p> <ul style="list-style-type: none"> how often did you feel that you lacked companionship? how often did you feel left out? how often did you feel isolated from others? How often do you feel that you can open up to other people about personal concerns? How often do you feel that you can rely on other people to provide help when you need it? 	Hardly ever (or never), Some of the time, Often	Suzman, 2009

In addition to these outcomes that tell you something about older adults' resilience, your group might also want to collect process evaluation data. Process evaluations are designed to document and analyze the development and actual implementation of programs and other activities assessing whether and how well services are delivered as intended or planned. Process data can include tracking attendance or participation, participant demographics, participant satisfaction, and measures of implementation activities (for example, program fidelity measures, such as adherence to the program curriculum). Collecting process data can help your group answer important questions about the implementation of your activity:

- How much of the activity did participants take part in?
- What are the characteristics of participants?
- How satisfied are participants? How satisfied are the staff who implemented the activity?
- Was the activity implemented as planned?

These questions may provide explanatory support indicating why your activities may or may not have achieved their desired effects. If you need more detail, Getting To Outcomes provides a primer on process evaluation (https://www.rand.org/pubs/technical_reports/TR101.html; Chinman, Imm, and Wandersman, 2004).

Partnership Measures

Given the importance of collaboration between villages, AFCs, and public health departments to achieve older adults' resilience, we also include several measures of partnership that may help provide insight about the presence and quality of these partnerships. These measures reflect a brief version of a longer tool called PARTNER that has been used to capture the work of public health collaboratives across the United States (<http://partnertool.net>; PARTNER Tool, 2017a).

To understand how well a partnership is working, data are needed to describe

- who is part of the partnership and how frequently they work together
- the strength and quality of interactions
- the level of trust and value within the partnership
- changes in collaborative activity over time (captured through repeating measures over time)
- the organizational and community benefits of collaborative activities.

Table 4.2 provides sample questions that can be used to evaluate the different aspects of partnership. Special analysis skills are required to understand how partnerships result in organizational networks and to calculate network level measures. Technical assistance using PARTNER measures is available through the Center on Network Science at the University of Colorado Denver (<http://partnertool.net/translating-data-to-practice/>; PARTNER Tool, 2017b). The CDC also has a guide that describes the fundamentals of evaluating partnerships (https://www.cdc.gov/dhdsp/docs/partnership_guide.pdf; CDC, 2008). It includes tools to help plan a partnership evaluation and contains a simple inventory that can be used to self-assess a partnership.

In addition to capturing partnership dynamics, you may want to capture the impact of collaborative activities. **Table 4.3** contains sample measures that could be used to describe the success of the collaborative activities outlined in **Chapter Three**.



Table 4.2. Survey Questions to Measure Partnership

Measurement Domain	Questions	Response Options
Presence of partnership	Over the past month, what organizations or agencies have you worked most closely with to promote older adults' resilience?	Free text list of organizations
<i>Questions asked for each organization listed in the response to the presence of partnership question</i>		
Frequency of interaction	About how frequently have you communicated with [insert organization name] in the past month?	Less than monthly, Monthly, Weekly, Daily, Don't know
Level of influence	How much power or influence (e.g., decisionmaking authority, leadership responsibility) do you think [insert organization name] has over activities to promote older adults' resilience? (Select one and please take your best guess)	Not at all, A small amount, A fair amount, A great deal
Level of involvement	How involved is [insert organization name] in promoting older adults' resilience?	Not at all, A small amount, A fair amount, A great deal
Resource contributions	To what degree has [insert organization name] contributed resources to promoting older adults' resilience?	Not at all, A small amount, A fair amount, A great deal
Reliability	To what degree has [insert organization name] been reliable in promoting older adults' resilience?	Not at all, A small amount, A fair amount, A great deal
Open communication	To what degree is [insert organization name]'s communication open and transparent (for example, their purpose and what they intend to do are clear) about older adults' resilience?	Not at all, A small amount, A fair amount, A great deal
<i>Summary questions asked of a single organization</i>		
Organizational benefits	What benefits has your organization received as a result of working with each organization?	Free text
Community benefits	In your opinion, what has been the impact of your and your partners work promoting older adults' resilience?	Free text



Table 4.3. Sample Measures for Collaborative Activities

Collaborative Activity	Sample Measure
<ul style="list-style-type: none">• Encourage older adults to join emergency information systems	Proportion of older adults in the community who are signed up for automated emergency alert and information systems
<ul style="list-style-type: none">• Participate in preparedness planning to ensure that the needs of older adults are represented	Presence of specific guidance in community AFC and preparedness plans that account for the needs and strengths of older adults
<ul style="list-style-type: none">• Develop/provide feedback on concise targeted educational materials for older adults	Penetration of dissemination efforts and uptake of information
<ul style="list-style-type: none">• Train or educate each other on specific areas of expertise (e.g., older adults, emergency preparedness)	Proportion of supportive service agencies that have response plans, communications plans, and continuity-of-operations plans in place to assist older adults during an emergency
<ul style="list-style-type: none">• Encourage older adults to join community emergency response teams or Medical Reserve Corps	Presence of older adults in community emergency response teams or Medical Reserve Corps

Using Evaluation Data to Inform Your Work

Once your evaluation data are collected and analyzed, your group will be able to determine whether its work is having the desired effects. It is important to acknowledge that the more rigorous your evaluation design is, the more confidence you can have that your activity produced or did not produce the intended effects. **Worksheet 4.3** provides a template to document which outcomes your activity was successful in achieving and which may require further action. In the first column, list each outcome your group was tracking (for example, disaster preparedness knowledge or strength of partnership interaction). Then describe in a single sentence any difference or change in the outcome (second column), and use the third column to indicate how this changed from before the activity was conducted (whether it got better, got worse, or stayed the same). In the fourth column, specify whether this met your expectations for the activity. For example, if the activity was supposed to improve disaster preparedness knowledge and your evaluation showed that knowledge did not improve after the activity, you would mark “Same” in the third column and “No” in the fourth column. In the fifth column, specify any action needed. For example, if the activity was intended to strengthen

partnership interactions but you missed your expectations, you would mark “Yes” to indicate that action is needed. Finally, the last column asks you to reflect on any potential barriers that might have influenced whether the activity had the desired effect (for example, participation in the activity was low).



Worksheet 4.3. Review Program Outcomes

Outcome	Difference/Change in Any of the Outcomes?	Met Expectations?	Action Needed?	Potential Barriers?
1.	Was this related to any issues captured by process data? What is the trend? <input type="checkbox"/> Better <input type="checkbox"/> Same <input type="checkbox"/> Worse	Did this meet your expectations for the activity? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.	Was this related to any issues captured by process data? What is the trend? <input type="checkbox"/> Better <input type="checkbox"/> Same <input type="checkbox"/> Worse	Did this meet your expectations for the activity? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.	Was this related to any issues captured by process data? What is the trend? <input type="checkbox"/> Better <input type="checkbox"/> Same <input type="checkbox"/> Worse	Did this meet your expectations for the activity? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Checklist 4.1 walks you through a brief continuous quality improvement exercise to help identify potential challenges that might have affected your activity and specific actions that you could take to address these challenges moving forward. Then record who will participate in the action, the resources needed, location details, and the target date for improvement as new activities in your existing plan (**Worksheet 4.2**). Enhancing your plan with improvement activities using **Worksheet 4.2** will help you identify what is necessary to achieve your goals and help you specify a target date for improvements to be made. If possible, complete the improvements prior to doing the activity again.



Checklist 4.1. What Continuous Quality Improvement Actions Are Needed to Improve the Activity?

A. Did participants represent the target population?

- ☐ Yes
- ☐ No—Review partnerships and referral sources to determine whether your group has the right relationships in place to get appropriate referrals. Review eligibility criteria used to identify the target population to ensure that they are specific enough to recruit appropriate participants.

B. Was the activity implemented as intended?

- ☐ Yes
- ☐ No—Improve staff training on how to implement the activity and assess whether implementation improves.

C. Was participation adequate?

- ☐ Yes
- ☐ No—Revisit how you recruit and retain participants in the activity to identify where improvements can be made. Assess whether there are any logistical barriers that might make it difficult for participants to attend (for example, transportation). Consider whether changing the time and place of the activity would improve participation. Consider whether the activity is appropriate for the target population.

D. Did you have the resources needed to implement the activity completely as intended?

- ☐ Yes
- ☐ No—Review your resources for implementation and evaluation to determine whether you have the right staff, resources, and partnerships to conduct the activity. Try to leverage additional resources from untapped sources in your community. A community resources assessment may help inform this effort. RAND's Getting To Outcomes manuals contain information on how to conduct a community resources assessment (https://www.rand.org/pubs/technical_reports/TR101.html; Chinman, Imm, and Wandersman, 2004).

E. Were the outcomes you expected reasonable and appropriate for the activity?

- ☐ Yes
- ☐ No—Revisit the goals of your activity and revise them to be more reasonable and appropriate.

F. Was your process and outcome evaluation appropriate?

- ☐ Yes

- ☐ No—Update the process and/or outcome evaluation plan to be more appropriate for your activity.

Summary

Nice job completing the toolkit! This chapter provided information on process, outcome, and partnership measures (**Table 4.1** and **Table 4.2**) and guidance on how to use those measures as part of an evaluation of your activities to promote older adults' resilience (**Worksheet 4.1** and **Worksheet 4.2**). This chapter also provided guidance on how to use the findings from your evaluation to improve and inform your work going forward (**Checklist 4.1** and **Worksheet 4.3**). After using this chapter, you should have selected your evaluation strategy, planned how to use your evaluation data, and reflected on what your evaluation findings mean for your current and future work promoting older adults' resilience. The content and worksheets of this toolkit are intended to be reused, even after you have completed your evaluation. Consider reviewing the toolkit annually to continue improving your work and refining your evaluation.

Appendix: Brief Description of Methods Used to Develop the Toolkit

We created this toolkit because no other similar toolkits existed. To create the toolkit, we conducted interviews with public health department staff, village executive directors, and AFC coordinators across the United States. We also conducted a survey of older adults' resilience that compared older adults living in villages and those not living in villages.

Interviews of Staff at Public Health Departments and Aging-in-Place Efforts

We interviewed three stakeholder groups. The first group consisted of 16 leaders (primarily executive directors) of **senior villages**. We recruited these executive directors with the help of the Village to Village Network. The Village to Village Network is a member-based organization of villages across the United States with a national staff that provides expert guidance, resources, and support to help communities establish and maintain their villages. Our recruitment strategy was to locate villages representing diversity in size and geographic region. The villages in our sample were formed between 2008 and 2015 (the average was 5.5 years in existence).

The second group consisted of **leaders of AFCs**, recruited with an initial email and up to four follow-up emails with the help of the AARP Public Policy Institute. We interviewed ten leaders of AFCs representing an even distribution across all U.S. geographic regions, rural or urban status, and varying tenure in the AARP Network of Age-Friendly Communities. These leaders were generally not AARP staff but, rather, were representatives of the coordinating bodies of the AFCs; most respondents were employed by local governments, but a few respondents had primary roles at academic institutions, community foundations, or other types of community-engaged organizations.

In order to understand the role that public health departments have in supporting older adults' resilience, we conducted a third set of interviews with **health department representatives**. These representatives were recruited with an initial email and up to four follow-up emails with the help of NACCHO. We interviewed 11 health department representatives primarily responsible for implementing emergency preparedness activities (mostly preparedness coordinators) representing an even distribution across all U.S. geographic regions and rural or urban status, all located within areas that had an AFC in the same jurisdiction (in the same city or county).

For all respondent groups, the interview protocols included questions about the greatest needs around helping older adults prepare for disasters; the types of resilience activities engaged in by their organizations, both generally and for older adults; other types of older adult-focused programming conducted by their organizations; who leads resilience activities

for older adults in their service areas; awareness of and collaboration with other older adult-serving and resilience-focused organizations and agencies in their regions; and ideas for how to assess progress around emergency preparedness and resilience for older adults. All informants gave verbal consent to participate, and the methods were approved by the RAND Corporation's Human Subjects Protection Committee and the Federal Office of Management and Budget.

Interviews were led by a member of the research team, with another team member taking detailed notes. Interviews were also audio-recorded. Recordings were referred to for clarification of the written notes and to confirm verbatim quotes, as needed.

Two researchers independently reviewed and summarized interview themes for each group, using the interview protocol as a guide for major topics. Lead researchers on the project, both of whom participated in conducting interviews, then reviewed the summary of themes, verifying major themes and suggesting clarification or expansion of key points when needed. Themes were then refined and expanded iteratively among the research team.

Survey of Older Adults

As part of toolkit development, we surveyed 357 older adults living in 17 villages and 884 older adults living in communities without the support of a village. Villages were located in 12 states and all four regions of the United States. For each village, we identified a matched non-village community (defined for the purposes of the match as a single county): We took the county in which the village was located and, from among surrounding counties, identified the county that most closely matched based on four characteristics—the percentage of the population older than 65, the percentage of the population with a disability, the percentage of the population below the federal poverty line, and population density per square mile. We calculated standardized scores representing each of these characteristics to determine the match.

Survey participants were interviewed over the phone and asked questions about their health resilience, social resilience, disaster resilience, and emotional resilience. The phone interviewer also collected information about participants' demographics (age, gender, income, living situation, race/ethnicity, length of time living in their current location, and presence of chronic conditions) and their exposure to AFCs in their county. Surveys took approximately 15 minutes to complete. Survey data were analyzed using linear regression to determine whether older adults living in villages were more resilient than older adults not living in villages. All survey participants gave verbal consent to participate, and the methods were approved by the RAND Corporation's Human Subjects Protection Committee and the Federal Office of Management and Budget.

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