Helping Communities During Public Health Emergencies

An Action Plan for Organizations

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Acknowledgments

Suggested Citation

Road Map

Introduction

During public health emergencies, maintaining the continuity of services and resources that are essential to health and safety is important. Public health emergencies can disproportionately affect certain populations. For example, the risk of serious illness and death related to the COVID-19 public health emergency increases with age, with the highest risk among adults ages 85 years and older.[1] Organizations, including community-based, faith-based, rural, and tribal organizations, can play a vital role during a public health emergency response given their familiarity with the community's unique needs and resources.

Who should use this Action Plan? This plan is for leaders and staff in organizations who are involved in selecting, adapting, implementing, and evaluating public health interventions in preparation for or during public health emergencies. This plan is a companion to Search. Find. Help., a resource library of public health interventions to support older adults and their caregivers during public health emergencies. This plan can be used by any organization to select, adapt, implement, and evaluate an intervention during a public health emergency response.

Getting started. This Action Plan provides background information on public health emergency preparedness and describes four phases to help organizations to assess the needs of the population and select, adapt, implement, and evaluate public health interventions. Each phase includes a checklist of topics covered, a summary of the steps involved, and links to resources to learn more.

HOW TO USE THIS ACTION PLAN:

- **Use this plan at any step** in the process of selecting, adapting, implementing, or evaluating a public health intervention.

- **Review all phases** of the Action Plan before getting started to understand how the phases fit together.

- **Engage partners and community members** who can offer expertise and resources to support selecting, adapting, implementing, or evaluating interventions.

- **Consult the resources section** of the Action Plan to learn more about selecting, adapting, implementing, and evaluating public health interventions.

Public Health Emergency Preparedness Background

Public health emergencies, also known as public health threats, are events that put the health of a community at risk. Events such as biological threats (e.g., viruses such as COVID-19), natural disasters, chemical and radiological events, and explosions are types of public health emergencies.[2]

Public health interventions during public health emergencies can include educational resources, services, programs, and policies. For example, interventions that supported older adults and their caregivers during the COVID-19 public health emergency included evidence-based exercise programs delivered virtually, programs that provided social support by phone or video, home-delivered meals, and public education and awareness campaigns. Interventions that support older adults before, during, or after a natural disaster include programs providing free portable batteries for people who use electrical medical devices, neighborhood preparedness programs, and utility restoration programs.

Planning for future public health emergencies. Organizations should prepare for public health emergencies.[3] This may include making preparations within the organization as well as partnering with local government or other organizations. Preparedness actions can include stockpiling critical medical supplies, distributing vaccines, ensuring adequate emergency medical personnel support, and coordinating with local and state public health authorities on emergency response

activities.[4] Organizations should develop preparedness plans based on four phases of emergency management: preparedness, mitigation, response, and recovery. The following elements of developing an effective preparedness plan have been adapted from The Capacity Building Toolkit for Aging and Disability Networks in Emergency Planning:[5]

① **Risk assessment.** Conduct a risk assessment and consider the population served. Some populations are disproportionately affected during emergencies, such as people who are older or have disabilities, those whose physical location places them at greater risk during a natural disaster, and those who are more likely to experience severe outcomes from an infectious disease outbreak. Consider the key threats facing the community; risks associated with physical location (e.g., flood plain); past mitigation efforts and their effectiveness; and ways to become involved with community emergency planning and management.

② **Emergency operations plan.** Create an emergency operations plan that can serve as an ongoing guide for responding to various hazards.

③ **Partnerships.** Expand partnerships to prepare for meeting the needs of the population. Partners may include local government, first responders, local and state emergency management offices, public health agencies, community and faith-based organizations, rural organizations, tribal organizations, social service agencies, health care organizations, and members of the population served. Begin by engaging current and potential partners to assess preparedness plans and consider adaptations for the population.

Establish short- and long-term goals and objectives for the partnership and consider how partnerships would contribute most effectively to serving the population.

④ **Preparedness exercises.** Engage the community served in emergency planning, including exercise or "practice" situations. Ready.gov has resources that address various disaster scenarios. Preparedness exercises can include **tabletop exercises**, which are discussion-based sessions to review everyone's roles during an emergency and their responses to particular emergency situation(s). For organizations collaborating with state and local government or public health authorities, it may be possible to participate in **functional exercises**, which occur in a simulated operational environment in which plans and readiness are tested by performing actual duties, and **full-scale exercises**, lengthy exercises that often take place on location with the same equipment and personnel who would be present during a real event.

⑤ **Communications.** Develop a means of communication with both internal staff and members of the community served before and during a disaster, including back-up communications methods when primary communications are inoperable during an emergency.

In the four phases that follow, we describe how community-based, faith-based, rural, and tribal organizations can act prior to, during, and following a public health emergency by assessing the needs of the population and selecting, adapting, implementing, and evaluating a public health intervention.

Phase 1

Assess the Needs of the Population

Define the Population

During a public health emergency, organizations must define the population in need of an intervention. The organization may define the population as people who are most affected by a public health emergency or at greatest risk of negative health outcomes during an emergency. Organizations may also define the population based on population characteristics such as age, gender, race, ethnicity, language, income, geographic location, and social and cultural factors, among others.[6] For example, an organization may define the population as adults over the age of 75 living in a specific county, or women over the age of 80 who live alone. Once the population has been defined, the organization can conduct a needs assessment.

Conduct a Needs Assessment

A needs assessment can help the organization identify the unmet needs of the population, and ultimately select the most beneficial public health interventions to address these needs.[7] Specifically, a needs assessment can help the organization understand the population's health status and issues affecting the population, such as health and social needs, gaps in services and resources, and concerns and challenges. A needs assessment can also identify strengths and assets in a community.

For the needs assessment, organizations can use existing, or secondary, data sources. Secondary data sources may include federal government statistics; assessments or studies conducted by local or state governments; results from needs assessments conducted by hospitals, human service providers, chambers of commerce, or charitable organizations; and studies conducted by researchers. The Appendix presents an overview of select public health secondary data sources; Healthy People 2030 also provides a list of data sources.

Needs assessments may also involve the collection of new, or primary, data. Engaging the population served is an important consideration in primary data collection. Consider any subpopulations within the community that are disproportionately affected during public health emergencies and how to assess their needs. Common primary data collection methods include focus groups, interviews, questionnaires, observation, or document review. In addition, interviews with state, local, or community leaders; public health officials; and medical and social service providers who are knowledgeable about the needs of the population may be useful. Given time and resource constraints during a public health emergency, organizations may need to adapt these methods. For example, during a public health emergency, virtual or online data collection may be more feasible than in-person methods.

If possible, conducting a needs assessment before a public health emergency happens can help an organization collect the information needed to plan ahead. Organizations in locations prone to a natural disaster, or any organization that wishes to prepare for an emergency situation, should consider conducting a needs assessment before an emergency happens. Organizations can also identify data sources before an emergency to facilitate access to relevant sources when an emergency happens.[8]

Needs assessments before and during public health emergencies can take several forms:[9]

- A **rapid assessment** (usually conducted immediately after the onset of a public health emergency) can provide information on needs, possible courses of action, and resource requirements. A rapid assessment may take up to one week.

  ○ The Community Assessment for Public Health Emergency Response (CASPER) is an epidemiologic technique designed to collect household-based information about a community's needs during all phases of a public health emergency. It is quick, reliable, relatively inexpensive, and flexible.

- A **detailed assessment** can be carried out after a rapid assessment if the public health emergency is changing and more information is needed. A detailed assessment may take up to one month.

- A **continual assessment** is an ongoing assessment throughout the public health emergency that can inform adaptations to response efforts and interventions.

EXAMPLE: CONDUCTING A NEEDS ASSESSMENT BEFORE AN EMERGENCY

A community-based organization in Maryland wants to implement an intervention that will support caregivers of older adults during severe weather events. To inform the search for an intervention, the organization conducts the following needs assessment activities:

- Review of the most recent *Caregiving in the U.S.* data collected by the National Alliance for Caregiving and AARP, or Centers for Disease Control and Prevention's data on caregivers from the Alzheimer's Disease and Healthy Aging Data Portal

- Virtual focus groups with a sample of caregivers of older adults

- In-depth interviews with staff from the State Department of Aging's National Family Caregiver Support Program and staff from the American Red Cross

EXAMPLE: CONDUCTING A RAPID NEEDS ASSESSMENT DURING AN EMERGENCY

A hazardous materials incident in Texas led to shelter-in-place orders for nearly 20,000 state residents. To quickly assess the needs of older adults living in the affected area, a direct services agency conducted a rapid needs assessment that included:

- A web-based survey of older adults in the service area

- Telephone interviews with a subset of older adults in the service area

- Telephone interviews with the regional office of the Texas Commission on Environmental Quality Emergency Response and other social service agencies serving the affected region

Phase 2

Select a Public Health Intervention

CHECKLIST

☐ 1. Determine the goals and objectives of the intervention.

☐ 2. Consider the community context.

☐ 3. Assess the resources available to implement the intervention.

When searching for and selecting a public health intervention, review the data collected during the needs assessment. Consider other factors relevant to selecting an intervention, including the organization's goals and resources, and the community context.

Determine Intervention Goals and Objectives

Use data from the needs assessment (**Phase 1**) to select an intervention that will best meet the needs of the population. Consider the following questions:[10]

- Based on the needs assessment, what are the unmet needs of the population (e.g., services and resources)?

- What types of interventions can address these needs?

- What types of changes would the interventions achieve?

- In what timeframe would these changes take place?

EXAMPLE: SELECTING AN INTERVENTION

A community-based organization in Florida that supports caregivers of older adults with Alzheimer's disease learned through a needs assessment that caregivers do not feel prepared to support their care recipient during natural disasters such as hurricanes, even though 55 percent of the organization's clients live within a designated hurricane evacuation zone. Using Search. Find. Help. to search for resources, the organization identified an existing disaster preparedness guide that can be shared with caregivers. The organization engaged with caregivers when distributing the guide to ensure that they understood how to use the guide and that they felt adequately prepared to support their care recipient during a hurricane or other natural disaster.

Consider the Community Context

Take into account the context of the community: its people, issues, and history. Interventions or resources informed by the culture of the community and the relationships among individuals and groups within it are more likely to be successful.[11] The Social-Ecological Model considers the interplay between individual, relationship, community, and societal factors. Interventions that address factors across multiple levels of this model can help create and sustain change.[12] An understanding of the community's government and politics; community institutions; existing groups and organizations, such as health and human service organizations, advocacy organizations, Veterans' organizations, and business organizations; economics; and social structure will provide valuable context that can facilitate successful implementation of a public health intervention.[13] In particular, it is useful to understand the roles that other local organizations may play during an emergency response, as well as current or past community programming related to emergency preparedness.

Assess Implementation Resources

Consider organizational resources, including funding, staff availability and expertise, and partnerships to help with implementation, dissemination, and sustainability.[14] Resource mapping can be used to document organizational resources and compare resources required for the intervention with available resources. At this time, also consider the resources required for evaluating the intervention (Phase 4). Exhibit 1 presents intervention selection considerations.

Exhibit 1. Considerations for Selecting an Intervention[15]

Cost and sustainability. Do financial resources exist to implement the intervention? What is the sustainability plan for the intervention for the expected duration of the public health emergency, and after the emergency, if needed? What is the plan for keeping content or materials current, if applicable?
Feasibility. Are systems in place to support the intervention? Is it realistic and within the control of the organization to implement the intervention?
Time available. How long will it take to implement the intervention? Are there constraints on the timeframe?
Reach. How will the intervention reach the population?
Acceptability. Will the organization staff and population served support the intervention?
Appropriateness. Does the intervention directly address the needs of the population?
Benefit. Are the benefits of the intervention worth the resources necessary to implement it?

FIND INTERVENTIONS USING SEARCH. FIND. HELP.

When selecting a public health intervention in Search. Find. Help., use the information gathered in the needs assessment (Phase 1) to help define the parameters. Matching intervention strategies to fit the goals, needs, and context will facilitate the success of the intervention. Using the Search. Find. Help. resource library, organizations can search and filter by:

- Population served (e.g., older adults, caregivers; subpopulations including rural, tribal, LGBTQ+, people with disabilities)

- Topic (e.g., deconditioning, chronic conditions, elder abuse or neglect, deferral of medical care, social isolation)

- Type of intervention (e.g., health care service, direct service)

- Language (e.g., English, Spanish, multiple languages)

- Setting (e.g., community, home, health care setting)

- Format (e.g., program, website, video, media campaign)

Phase 3

Adapt and Implement a Public Health Intervention

☐ 1. Consider if an intervention will be successful in the population.

☐ 2. Develop internal and external communication strategies.

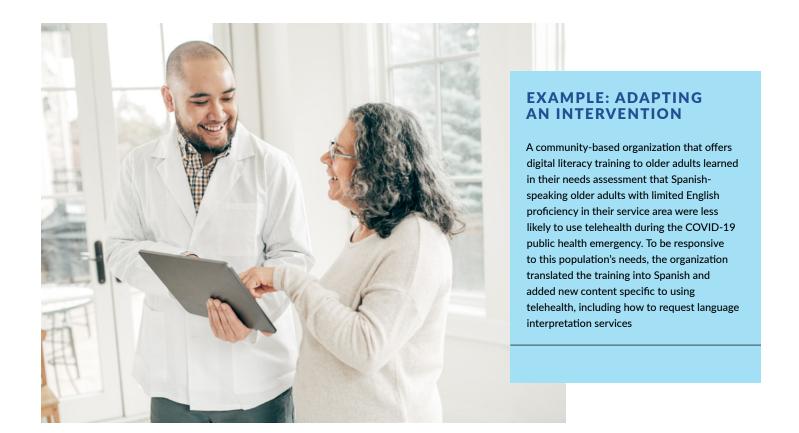☐ 3. Begin planning the evaluation.

Adapt an Intervention

Organizations may decide to adapt different parts of public health interventions for new populations or new circumstances—prior to or during a public health emergency—rather than develop a new intervention. Adaptations can be made to an existing program's content, delivery, logistics, training, or evaluation.[16,17] For example, during a public health emergency like COVID-19, organizations may need to switch from in-person programming to virtual delivery to comply with public health physical distancing guidelines.

COMMON INTERVENTION ADAPTATION STEPS INCLUDE:[18]

1 **Assess the community.** Identify social determinants of health that affect the population by conducting focus groups, interviews, and needs-based assessments. Consider possible cultural influences for the adaptation.

2 **Understand the intervention.** Review theories or frameworks supporting the intervention.

3 **Select the intervention.** Choose an intervention that meets the needs of the population and context, including the timeframe needed to adapt and implement the intervention to meet those needs.

4 **Consult experts.** Connect with original intervention developers for information regarding the intervention, if questions arise.

5 **Decide what needs to be adapted.** Consider possible changes to program structure, content, or delivery to avoid mismatches between the intervention and the new context.

6 **Adapt the original intervention.** Adapt the original intervention content, for example, by making cultural adaptations.

7 **Train staff.** Ensure that staff are trained to deliver the intervention to the population.

8 **Test adapted materials.** Pre-test adapted materials with the population by assessing the readability and reading level of the materials and ensuring materials are culturally appropriate.

9 **Implement the intervention.** Develop an implementation plan based on the results of previous steps. Identify implementers, activities, and outcomes, and determine the scope, sequence, and instructions for implementation.

10 **Evaluate the intervention.** Document the adaptation process throughout implementation and evaluate the process and outcomes of the adapted intervention. Develop evaluation questions, choose indicators and measures, and plan qualitative and/or quantitative data collection and analysis. Phase 4 describes evaluation in greater detail.

When adapting an intervention, think through implications of changes for intervention fidelity.[19] Changes that do not alter the main tenets and goals of a public health intervention are not likely to affect program fidelity. These changes may include modifying terms used or tailoring learning activities to reflect culture or other relevant demographics. Significant changes may affect program fidelity. These changes may include not adapting staff to the population's cultural needs; changing key messaging and learning materials significantly; or altering intervention goals, which may diminish its effectiveness. During a public health emergency, organizations may determine that maintaining fidelity is not feasible or the highest priority when adapting an intervention.

EXAMPLE: ADAPTING AN INTERVENTION

A community-based organization that offers digital literacy training to older adults learned in their needs assessment that Spanish-speaking older adults with limited English proficiency in their service area were less likely to use telehealth during the COVID-19 public health emergency. To be responsive to this population's needs, the organization translated the training into Spanish and added new content specific to using telehealth, including how to request language interpretation services

Communicate about the Intervention

Develop an internal **communication plan** with communication strategies, partnership plans, message and materials development, implementation and dissemination plans, outcome evaluation plans, and timelines.

Create an external **dissemination plan** (Exhibit 2) for communicating with the population during a public health emergency. Identify the appropriate setting, time of day, and place (e.g., home, work, school) to reach the population, as well as the channel, or means of delivering the message. Communication channels may include face-to-face interactions, such as neighborhood gatherings; mass media; telephone and electronic communication; and written communication. During public health emergencies such as COVID-19, media such as radio, television, social media, and internet can be effective means of reaching populations.

Use results from the needs assessment (**Phase 1**) to discern which channel(s) would best reach the intended population, promote the credibility of the message with the population, and facilitate the population taking action. Defining subgroups of a population according to common characteristics is called **segmentation**.[20] Segmentation can assist organizations in implementing targeted messages, materials, and activities that are relevant to a subgroup's culture, behavior, needs, beliefs, attitudes, and awareness.
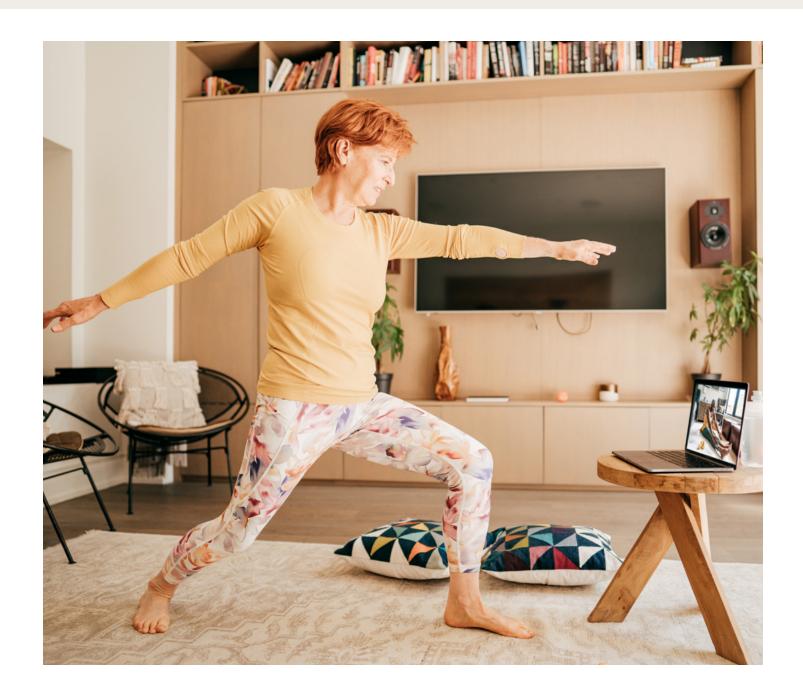
Information about the public health emergency or the intervention should be direct, clear, and accessible, and should avoid jargon and abstract language.[21] Acknowledge uncertainties related to the public health emergency. Consider including the following in communications:[22]

- **An expression of empathy.** The population may be confused, afraid, or receiving contradictory information. Acknowledging this directly can increase trust in the organization's message.

- **What is known about the public health emergency.** Clear and concise information can help the population determine steps to protect themselves and their loved ones.

- **What is not yet known and how answers will be found.** This can show the population how the organization is working to assist them during the emergency.

- **Explanations of the public health actions being taken, and why.** Helping the population understand the basic actions taken can empower people to make decisions within this context.

- **A statement of commitment.** This can reinforce the organization's dedication to the population and help build trust.

- **Where to learn more.** Sharing information on how to find answers to questions may help reduce the population's concerns during the emergency.

Exhibit 2. Sample External Dissemination Plan Template[25]

Audience	Product	Channel	Release Date	Person Responsible
Caregivers of older adults	Fact sheet on COVID-19 safety precautions for care recipients	Posted on organization's website; Linked on organization's social media accounts	April 2020	Staff A
Older adults living in California	Wildfire preparedness tips	Mailed newsletter; Newspaper article	July (annually)	Staff B

Begin Planning the Evaluation

Intervention planning should account for future evaluation activities (Phase 4). It should consider the research questions that will guide the evaluation, goals, indicators and corresponding outcomes, evaluation design, data collection strategies, and the resources (staff, budget) and time available for evaluation activities.[23] To begin evaluation planning, organizations can develop a logic model, which describes an intervention's goals, inputs, activities, outputs, outcomes, impacts, and contextual factors.

Phase 4

Evaluate the Public Health Intervention

CHECKLIST

☐ 1. Understand the importance
       of evaluation.

☐ 2. Distinguish between types
       of evaluation designs.

☐ 3. Follow steps to evaluate
       an intervention.

Why Evaluation Matters

Evaluating an intervention can demonstrate its effectiveness, identify ways to modify and improve the intervention, and provide accountability and transparency to participants, community members, funders, and other stakeholders.

Types of Evaluation Designs

There are several designs that organizations can consider when evaluating a public health intervention:

- A **formative evaluation** provides insight into the nature of a problem so it can be addressed.

- An implementation or **process evaluation** assesses whether an intervention has been implemented as intended.

- An effectiveness or **outcome evaluation** measures progress toward the outcomes the intervention intends to address.

- An **impact evaluation** assesses the effect of the intervention on participants, for example, their changes in awareness, knowledge, attitudes, behaviors, and/or skills.

- An evaluation of an intervention's **efficiency** looks at whether activities are conducted with appropriate use of resources such as budget and staff time.

- A **cost-effectiveness** evaluation identifies whether the intervention's benefit or value exceeds the cost of delivering the intervention.

- Evaluation of causal **attribution** examines whether observed outcomes can be attributed to the intervention, instead of other things happening at the same time.

Evaluation Steps

The following six steps are adapted from the Centers for Disease Control and Prevention (CDC) Framework for Program Evaluation (Exhibit 3).

Step 1. Engage Stakeholders. Convene stakeholders, who are the people or organizations invested or interested in the intervention or the evaluation. This includes those involved in implementing the intervention (e.g., program management and staff, funders, partners); those served or affected by the intervention (e.g., clients or patients, community members); the intended users of the evaluation findings (e.g., funders, partners, coalition members); and, as needed, a consultant with evaluation expertise.[24]

Step 2. Describe the Intervention. To identify the evaluation questions, create a comprehensive description of the intervention, including the public health need it addresses, population that needs to take action, intended outcomes, activities and outputs, resources or inputs, the stage of development, and the context or environment.

Step 3. Focus Evaluation Design. Determine the evaluation questions and evaluation design. Create specific evaluation questions about implementation, effectiveness, efficiency, and/or attribution. Consider the purpose of the evaluation, who will use the results and how, and what stakeholders need from the evaluation. Consider feasibility and logistics based on the intervention's stage and the available resources, including staff time and budget.

Exhibit 3. CDC Framework for Program Evaluation

Source: CDC: A Framework for Program Evaluation. https://www.cdc.gov/eval/framework/index.htm.

Step 4. Gather Credible Evidence. First, develop or identify existing indicators to measure progress on activities (process indicators) and/or outcomes (outcome indicators). SMART (specific, measurable, achievable, realistic, time-bound) objectives can be used as indicators. An indicator must be clear, specific in terms of what it will measure, focused, and measure an important dimension of the activity or outcome. There can be more than one indicator for each activity or outcome. Logic models are tools that visually represent the relationship between an intervention's activities and its intended outcomes. CDC offers resources on how to develop and use a logic model.

Next, identify **data sources and data collection methods**. Data can include secondary data or primary data that the organization collects (Phase 1). Organizations designing their own tools should be aware of factors that influence data quality, such as the design of the data collection instrument, procedures for data collection, staff training, and data management, among others. Consider using mixed methods to increase the accuracy and reliability of evaluation findings.

Step 5: Justify Conclusions. Analyze and interpret the evidence collected and use it to justify findings. The presentation of data should be clear and understandable.

Benchmarks or performance indicators are the expected changes from a known baseline for each outcome indicator. To judge the performance of the program, determine benchmarks based on standards such as the intervention's goals, population needs, use of resources, community values, and progress. Interpret the findings and make a judgment about the program's merit, worth, or significance, and consider any limitations of the evaluation.

Step 6: Ensure Use of Evaluation Findings and Share Lessons Learned. The results of the evaluation can be used to improve the intervention, identify opportunities for training and technical assistance, demonstrate the intervention's effectiveness, offer accountability, justify funding, and inform policy decisions.

To put evaluation findings to use, develop recommendations for actions to consider as a result of the evaluation; prepare steps for using the evaluation findings; facilitate feedback among partners involved in the evaluation; and disseminate the findings in a timely, unbiased, and consistent manner. Consider tailoring materials and communications methods to meet the needs of different key audiences, and include contextual information as well as a discussion of strengths and limitations. Dissemination may include developing an evaluation report.

EXAMPLE: EVALUATING AN INTERVENTION

A community-based organization coordinates weekly visits between college students and older adults who live alone. During the COVID-19 public health emergency, the organization adapts the program to conduct these visits virtually. The organization wants to evaluate the program adaptation and designs a process evaluation. Process measures include the number of older adults who participate in a virtual visit and the total number of virtual visits per month. The organization also assesses short-term outcomes among older adult participants through a web-based survey. The survey asks questions about loneliness, social isolation, and satisfaction with the program.

Conclusion

Organizations, including community-based, faith-based, rural, and tribal organizations, can play a key role during public health emergency responses. They can help maintain the continuity of services and resources that are essential to ensure the population is safe and healthy. This Action Plan, a companion to the Search. Find. Help. resource library, provides guidance to organizations in each phase of the process of assessing the needs of the population, and selecting, adapting, implementing, and evaluating a public health intervention. The plan can support organizations as they assess the community's needs before and during an emergency, select an intervention that meets these needs, determine adaptations to make the intervention responsive to a specific population or community context, implement the intervention, and evaluate its effectiveness.

Search. Find. Help.
SearchFindHelp.org

Learn More

The following resources provide more information about public health emergency preparedness and selecting, adapting, implementing, and evaluating public health interventions during emergencies.

Adapting a Public Health Intervention

Making Adaptations Tip Sheet. U.S. Department of Health and Human Services.

Making Health Communication Programs Work. U.S. Department of Health and Human Services, National Institutes of Health, and the National Cancer Institute.

Program Development and Evaluation. University of Wisconsin-Madison.

Rural Community Health Toolkit. Rural Health Information Hub.

Developing Strategies for Child Maltreatment Prevention - A Guide for Adapting Evidence-Based Programs. Texas Department of Family and Protective Services and the University of Texas at Austin Child and Family Research Institute.

Evaluating a Public Health Intervention

Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide. Centers for Disease Control and Prevention.

Program Evaluation. Centers for Disease Control and Prevention.

Preparing an Evaluation Report. Centers for Disease Control and Prevention.

Making Health Communication Programs Work. U.S. Department of Health and Human Services, National Institutes of Health, and the National Cancer Institute.

Program Development and Evaluation. University of Wisconsin-Madison.

Evaluation Checklists. The Evaluation Center: Western Michigan University.

Implementing a Public Health Intervention

Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide. Centers for Disease Control and Prevention.

Making Health Communication Programs Work. U.S. Department of Health and Human Services, National Institute of Health, and the National Cancer Institute.

Planning and Tools. University of California, San Francisco Family Health Outcomes Project.

Program Development and Evaluation. University of Wisconsin-Madison.

Community Health Assessment Toolkit – Step 7: Plan Implementation Strategies. American Hospital Association Community Health Improvement.

Public Health Preparedness

Public Health Preparedness: Strengthening the Nation's Emergency Response State by State. Centers for Disease Control and Prevention.

The CDC Field Epidemiology Manual. Centers for Disease Control and Prevention.

Capacity-Building Toolkit for including Aging & Disability Networks in Emergency Planning. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

Public Health Emergency Preparedness and Response Capabilities – National Standards for State, Local, Tribal, and Territorial Public Health. Centers for Disease Control and Prevention.

Public Health Preparedness. National Association of County and City Health Officials.

Meeting the Needs of At-Risk Populations during the 2009 H1N1 Pandemic Response – A Look at Key Strategies, Successes, and Challenges. Association of State and Territorial Health Officials and Center for Infectious Disease Research and Policy.

Public Health Toolkits

Rural Health Promotion and Disease Prevention Toolkit. Rural Health Information Hub.

Community Tool Box. University of Kansas Center for Community Health and Development.

Community Health Assessment Toolkit. American Hospital Association Community Health Improvement.

Appendix

EXAMPLES OF PUBLIC HEALTH SECONDARY DATA SOURCES

Organization	Data Source	Description	Data Level
Centers for Disease Control and Prevention	Behavioral Risk Factor Surveillance System	Data on health-related risk behaviors, chronic health conditions, and use of preventive services, which can be stratified by demographic characteristics, prevalence of risky health behaviors, and prevalence of routine health examinations. Provides the Chronic Disease Indicators Tool, which allows users to view and compare indicators by location.	Local and state/territory
Centers for Disease Control and Prevention	Alzheimer's Disease and Healthy Aging Data Portal	Data on key indicators of health for older adults, including caregiving, subjective cognitive decline, mental health, nutrition, overall health, screenings and vaccinations, and smoking and alcohol use.	State/territory, regional, and national
Centers for Disease Control and Prevention	Prevention Status Reports	Reports on the status of public health policies and practices in 10 areas: alcohol-related harms; food safety; health care-associated infections; heart disease and stroke; HIV; motor vehicle injuries; nutrition, physical activity, and obesity; prescription drug overdose; teen pregnancy; and tobacco use.	50 states and District of Columbia
U.S. Census Bureau	American Community Survey	Social (e.g., ancestry, citizenship status, disability status); economic (e.g., employment status, health insurance coverage, occupation); housing (e.g., rent, tenure, bedrooms); and demographic characteristics (e.g., age, sex, race) data, for a selected geography, period of time, or population.	Local, state, regional, and national
Centers for Medicare & Medicaid Services	Mapping Medicare Disparities Tool	Health outcome measures for disease prevalence, costs, hospitalization for 60 specific chronic conditions, emergency department utilization, readmissions rates, mortality, preventable hospitalizations, and preventive services among Medicare beneficiaries. Includes population view, in which data can be filtered by age, race and ethnicity, and sex; and hospital view, which provides hospital-level quality and cost data.	County, state/territory, and national
Health Resources and Services Administration	Area Health Resources Files	Data on health care professions, health facilities, population characteristics, economics, health professions training, hospital utilization, hospital expenditures, and environment.	County, state/territory, and national
Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute	County Health Rankings & Roadmaps	Health-related rankings and data on health outcomes and health factors including health behaviors, clinical care, social and economic factors, and physical environment.	County
The Dartmouth Institute for Health Policy and Clinical Practice	Dartmouth Atlas of Health Care	Data on health care spending, utilization, capacity, and mortality. Topics include Medicare reimbursements, end-of-life inpatient care, care for chronically ill, primary care access and quality measures, post-discharge events, mortality, medical discharge rates, surgical discharge rates, COVID-19 cases and deaths, and hospital and physician capacity.	Local, regional, and national
United Health Foundation	America's Health Rankings	Data on social and economic factors, physical environment, clinical care, behaviors, and health outcomes, such as senior health, health of women and children, chronic disease, mental health, COVID-19 risk factors, tobacco and substance use, and nutrition, physical activity, and obesity.	State and national
Trust for America's Health	States in Detail	Data on health indicators such as child and school health, environmental health, health equity, infectious disease, chronic illness, obesity, prevention and public health policy, public health funding, public health preparedness, and substance misuse and mental health. Provides fact sheets, policy briefs, funding recommendations, and advocacy opportunities.	50 states and District of Columbia

References

1   Centers for Disease Control and Prevention. (2021). Your Health: Older Adults Coronavirus Disease 2019 (COVID-19). https://stacks.cdc.gov/view/cdc/107691/cdc_107691_DS1.pdf.

2   Centers for Disease Control and Prevention. (2010). Public Health Preparedness: Strengthening the Nation's Emergency Response State by State. https://permanent.fdlp.gov/lps126685/2010phprep_dedication.pdf.

3   Centers for Disease Control and Prevention. (2010). Public Health Preparedness: Strengthening the Nation's Emergency Response State by State. https://permanent.fdlp.gov/lps126685/2010phprep_dedication.pdf.

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