Strategies for Engaging with and Training Community-Based Partners to Improve the Outcomes of At-Risk Populations

A Review of the Evidence

Public health emergencies disproportionately impact certain population groups who cannot respond to these emergencies as effectively as the population at large. These groups are often already the most vulnerable in a community and suffer from disparities that may be exacerbated by such events. To effectively protect at-risk populations, public health practitioners at the federal, state, local, territorial, and tribal levels need to engage these groups in preparedness efforts to better understand and address the barriers these populations face during emergencies.

Community-based partners (CBPs) can be key collaborators for public health agencies in reaching at-risk populations before and after a public health emergency. At-risk populations often see CBPs as trusted agents whom they already rely on for services and information during nonemergency situations. Public health practitioners play a key role in establishing and maintaining partnerships with CBPs that can promote community preparedness and response activities targeted at at-risk populations. However, little guidance is currently available on evidence-based strategies for developing and maintaining these partnerships or on the best approaches for training CBPs in emergency preparedness.

Scope of the Review

To examine what evidence currently exists on strategies for engaging and training CBPs, the National Academies of Sciences, Engineering, and Medicine’s Committee on Evidence-Based Practices for Public Health Emergency Preparedness and Response conducted an evidence review focused on the following questions:

What is the effectiveness of different strategies for engaging with and training CBPs to improve the outcomes of at-risk populations after public health emergencies?

» What is the effectiveness of strategies for engaging with and training CBPs before a public health emergency?

» What is the effectiveness of strategies for engaging with and leveraging existing CBPs during a public health emergency?

» What benefits and harms (desirable and/or undesirable impacts) of different strategies for engaging with and training CBPs have been described or measured?

» What are the barriers to and facilitators of effective engagement and training of CBPs?

Who is at-risk?

The committee adopted a broad definition of at-risk populations, adapted from the Centers for Disease Control and Prevention’s (CDC’s) Public Health Workbook to Define, Locate, and Reach Special, Vulnerable and At-Risk Populations in an Emergency, which encompasses individuals with social and/or structural vulnerabilities whose access and functional needs may not be fully met by “traditional service providers or who feel they cannot comfortably or safely use the standard resources offered during preparedness, response, and recovery efforts.” CDC has identified five categories to help identify members of these populations: (1) economic disadvantage; (2) language and literacy; (3) medical issues and disability, including physical, mental, cognitive, or sensory; (4) cultural, geographic, or social isolation; and (5) age.
Which CBPs were included?
For the purposes of this review, the committee defined CBPs to include organizations and individuals that are representative of a community or a defined segment of a community and have established relationships with and/or serve at-risk populations. CBPs may include governmental (e.g., social services agencies) and nongovernmental (e.g., faith- and community-based organizations) entities, as well as individuals who are involved with at-risk populations during and following a public health emergency (e.g., community health workers and tribal leaders).

How is engagement with CBPs currently being practiced?
The committee identified two broad categories of current practices: (1) those aimed at training and/or engaging individual CBPs to reach particular at-risk populations and (2) those aimed at creating coalitions or partnerships that include multiple CBPs. Within those two categories, the review included three strategies:

» Culturally tailored preparedness training programs for CBPs and the at-risk populations they serve

» Engagement of CBPs in preparedness outreach activities targeting at-risk populations

» Engagement and training of CBPs in coalitions addressing public health preparedness and resilience

Practice Recommendation for Engaging and Training Community-Based Partners
Based on its review of the relevant evidence, the committee issued the following practice recommendation:

Engaging and training CBPs serving at-risk populations is recommended as part of state, local, tribal, and territorial public health agencies’ community preparedness efforts so that those CBPs are better able to assist the at-risk populations they serve in preparing for and recovering from public health emergencies. Recommended CBP training strategies include:

» the use of materials, curricula, and training formats targeted and/or tailored to the individual CBPs and the at-risk populations they serve; and

» train-the-trainer approaches that utilize peer or other trusted trainers to train at-risk populations.

CBP engagement and training should be accompanied by targeted monitoring and outcome evaluation or conducted in the context of research when feasible so as to improve the evidence base for engagement and training strategies.

Basis for the Practice Recommendation
The committee's practice recommendation is based on a mixed-method review\(^1\) of the scientific literature (peer-reviewed and gray literature) published from 2001 to June 2019. Findings on effectiveness and the corresponding level of certainty (certainty of evidence\(^2\) depicted in Table 1) were based on 11 quantitative studies that evaluated the impact of CBP engagement and training strategies on relevant outcomes. Nine of these 11 studies evaluated culturally tailored preparedness training programs for CBPs and the at-risk populations they serve. Supporting evidence from 1 case report and 13 systematic reviews of community engagement strategies and culturally tailored interventions used outside the emergency preparedness context was also considered. This body of evidence resulted in the following conclusions regarding the three CBP engagement and training strategies noted above:

» The evidence suggests that culturally tailored preparedness training may be effective in improving outcomes for at-risk populations following a public health emergency. However, there is little evidence linking improvements in preparedness phase outcomes (e.g., preparedness knowledge and behaviors) with health and other outcomes after an event.

» There is very limited evidence on the effects of engaging CBPs in preparedness outreach activities targeting at-risk populations.

» There is very limited evidence on the effects of engaging and training CBPs in coalitions addressing public health preparedness and resilience.

\(^1\)Mixed-method reviews involve the integration of quantitative, mixed-method, and qualitative evidence in a single review.

\(^2\)“Certainty of evidence” refers to the level of certainty in the effect of a given strategy based on evidence from the review.
The following evidence summaries were informed by evidence from 11 quantitative and 23 qualitative research studies, 15 case reports, and 7 descriptive surveys.

**Benefits and Harms:** Engagement and preparedness training of CBPs can benefit communities in multiple ways (e.g., increased reach to at-risk individuals, improved CBP preparedness, enhanced trust). Such benefits are more likely when CBPs are able to actively participate and collaboration takes place across stakeholder groups that represent the diversity of the at-risk population. Undesirable effects (e.g., reduced trust) can result when engagement and training activities do not meet expectations.

**Acceptability and Preferences:** CBPs generally value inclusion and shared ownership of community preparedness efforts and are often willing to collaborate with public health agencies.

**Feasibility and Public Health Emergency Preparedness and Response System Considerations:** Engaging and training CBPs may be time and resource intensive. Capacity challenges and competing priorities are likely to be common barriers for both public health organizations and CBPs.

**Resource and Economic Considerations:** Many CBPs and public health agencies already face challenges in sustaining underfunded programs and high staff turnover, which may discourage engagement and training efforts. Competing priorities for limited resources may require that these organizations prioritize engagement and training initiatives (e.g., targeting specific at-risk groups based on local needs). Leveraging existing resources and programs can help address financial constraints.

**Equity:** Engagement and training of CBPs may create equity-related benefits by mitigating the often disproportionate effects of disasters on at-risk populations.

**Ethical Considerations:** Engaging communities is ethically justified if it is likely to reduce harm and create benefits for relevant stakeholders and is an efficient means of achieving better preparedness. Additionally, public health officials have a fundamental obligation to engage people in decisions that might affect their own well-being.

**TABLE 1** Findings from the evaluation of different strategies for engaging and training CBPs in preparedness for specific CBP and at-risk population outcomes.

<table>
<thead>
<tr>
<th>Finding Statement</th>
<th>Certainty</th>
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<tr>
<td>Culturally tailored preparedness training programs improve public health emergency preparedness and response (PHEPR) knowledge of CBP representatives</td>
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<tr>
<td>Culturally tailored preparedness training programs improve attitudes and beliefs of CBP representatives regarding their preparedness to meet needs of at-risk individuals</td>
<td>●●</td>
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<td>Culturally tailored preparedness training programs increase CBP disaster planning</td>
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<tr>
<td>Culturally tailored preparedness training programs improve the PHEPR knowledge of trained at-risk populations</td>
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<tr>
<td>Culturally tailored preparedness training programs improve attitudes and beliefs of trained at-risk populations regarding their preparedness</td>
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<tr>
<td>Culturally tailored preparedness training programs improve preparedness behaviors of trained at-risk populations</td>
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<tr>
<td>CBP engagement in preparedness outreach activities improves the attitudes and beliefs of at-risk populations toward preparedness behaviors</td>
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<td>CBP engagement and training in coalitions addressing public health preparedness/resilience increases the diversity of coalitions, the coordination of CBPs with other response partners, or capacity to reach and educate at-risk populations before an emergency</td>
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**Context Considerations**

Evidence on CBP engagement and training strategies was drawn from studies that included a mix of urban, suburban, and rural settings and examined multiple types of CBPs (e.g., nongovernmental social services organizations, faith-based organizations, community health workers) that work with different types of at-risk populations (e.g., low-income minorities, adults with disabilities, tribal populations). The recommended training strategies were found to be beneficial in multiple different CBPs/at-risk populations, suggesting the evidence is likely broadly applicable but the limited number of studies for each population precludes strong conclusions.
Considerations for Implementation

Considerations for Engaging Community-Based Partners

- Ensure that CBP engagement efforts feature a clearly articulated purpose and goals, a shared language, an acceptable power balance, and a sense of shared ownership.
- Ensure that multistakeholder collaborations with CBPs are diverse and inclusive, with particular attention to those groups that are often excluded and marginalized.
- Engage umbrella organizations (e.g., American Red Cross, United Way) to reach smaller, local, community-based organizations.
- Consider participatory engagement strategies that allow for ongoing, bidirectional communication with CBPs to build trust and buy-in prior to an emergency.
- Develop formal agreements to clarify the nature of membership roles and responsibilities in collaborations with CBPs.
- Consider designating a coordinator to maintain the focus of coalitions, mitigate problems of competing priorities, and minimize perceptions of uneven power dynamics.
- Identify information technology (e.g., resource databases) and existing data sources that can be used to facilitate more timely engagement of CBPs and to link at-risk populations with needed services during an emergency.

Considerations for Training Community-Based Partners

- Tailor the curriculum and format of CBP preparedness training programs to the learning needs and preferences of specific audiences and ensure that they are culturally sensitive and appropriate.
- Consider soliciting stakeholder feedback in the evaluation of training program materials and content.

Evidence Gaps and Future Research Priorities

» Addressing the limited types of CBP engagement and training strategies evaluated in the literature: Future research is needed to expand the evidence base to include a broader array of strategies, with particular focus on strategies for leveraging existing CBPs during a public health emergency.

» Addressing methodological limitations: Approaches to strengthen the evidence base and increase the certainty of the evidence should include the use of objective, validated measures when feasible; the collection of baseline data; study designs that enable the evaluation of issues related to implementation in real-world settings; and the evaluation of long-term and post-disaster outcomes, including equity-related outcomes.

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