



UNIVERSITY OF SAN FRANCISCO

CHANGE THE WORLD FROM HERE

Public – Nonprofit Partnerships in Public Health Emergency

Response: Maximizing Impact Through Collaboration

by

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Capstone Research Report Submitted in Partial Fulfillment
of the Requirements for the
Master of Nonprofit Administration Degree
in the School of Management
directed by Dr. Marco Tavanti

San Francisco, California

Summer 2018

Abstract

This paper looks at the role of nonprofits in public health emergency response at the level of service delivery. The idea was prompted by discussions with the Foundation for the Centers for Disease Control and Prevention (CDC-F), which has recently seen a surge in its activities in public health emergency response. A review of the literature on interactions between nonprofit organizations and public health and other government entities and a survey of experts from the CDC-F, federal and local government, and the nonprofit sector, provided insights into how nonprofit-public health partnerships can be structured and the qualities of nonprofit organizations that can strengthen the response. Partnerships should build on the strengths of the different entities to maximize the performance of each. Inclusion of nonprofits during the planning phase, establishment of a trust relationship, clarifications of roles and expectations, and assurance of the capacity of nonprofits to carry out response work are important steps. Strengths of nonprofits include their front-line work with communities, including vulnerable and difficult to reach populations. Concerns include unfamiliarity of nonprofits in working in a response environment, an approach to accountability different from the public sector, and an imperfect match of skills to the work. Opportunities exist to move forward. The paper provides a list of considerations in establishing collaborations and possible steps to advance partnerships. This report can serve as an information resource for the CDC-F as it develops and strengthens its role in public health response.

Acknowledgments

I'd like to thank my friends, family, classmates, and faculty who supported me throughout my return to school and in completion of this project. Thank you to all for the time spent listening to my concerns, your understanding about my less-flexible schedule, and your guidance. A special thanks to Dr. Marco Tavanti, whose enthusiasm and energy strengthen the program, and to Judy Monroe, MD, President and CEO of the CDC Foundation, whose support was critical to collaborating with the CDC Foundation throughout my Masters program and in completing this Capstone Project. Finally, a special thank you to the experts who participated in the interviews and completed the surveys.

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Section 1. Introduction

Congress created the CDC Foundation (CDC-F) in 1992 as a 501(c)(3) charity to mobilize resources from the philanthropic and private sectors to support the work of the Centers for Disease Control and Prevention (CDC). By bringing in revenue to support CDC's ability to address health threats, the CDC-F seeks to reduce morbidity and mortality with an impact greater than what an individual person or organization can achieve. (Foundation for the Centers for Disease Control and Prevention, n.d.).

The CDC-F portfolio covers a wide range of public health topics, from global tobacco use, to environmental exposures, to infectious diseases. Over the past few years, the CDC-F's role in public health emergency response, including responses to hurricanes and to threats from infectious diseases such as those from Ebola and Zika viruses, has grown. Participation in emergency response in both domestic and international settings will likely continue to be an important focus of the CDC-F. CDC-F is reviewing its capabilities in public health response to improve its work and leverage its unique position as a nonprofit aligned to a national level government agency.

The Federal Emergency Management Agency's (FEMA) National Response Framework (NRF), the national plan for the federal government's response to disasters, cites the importance of collaborations and encourages governments to develop ways to use volunteers and donated goods (FEMA, 2010). The NRF also notes that non-governmental organizations, including nonprofits, are key partners in preparedness and response activities, and can support

efforts at all levels of government. It cites the importance of their work with vulnerable populations and those populations that might be difficult to reach, e.g., non-English speaking communities (Homeland Security, 2013). It states that government should consider planning efforts that will help a nonprofit perform its functions during a response (Homeland Security, 2013).

This paper provides insights on public-nonprofit partnerships in preparedness and response and summarizes potential areas for collaboration between nonprofits and the public sector. Recommendations focus on support of a response at the local level, the level of responsibility for most public health efforts. The paper addresses the following questions:

- What is known about partnerships between public health response and the nonprofit sector?
- What can nonprofit organizations contribute to public health response at the level of service delivery?
- How can the CDC-Foundation improve its ability to support the role of nonprofits in a public health emergency response at the local level?

Section 2: Literature Review

The literature review looked at descriptions of public-nonprofit collaborations, including those in public health response, and at characteristics of public-nonprofit sector collaboration. It also reviewed the roles nonprofits can play in an emergency response, including public health emergencies. As the literature analyzing the role of nonprofits in a public health emergency

response was limited, the review was expanded to include characteristics of public-nonprofit collaboration in both emergency and non-emergency settings, as many issues or strategies are likely similar to those in emergency settings. It also included literature on complexities of overall public-nonprofit partnerships. The “grey” literature was also included in the search, and resulted in the addition of a report summarizing experiences from the field.

Models for Collaboration

The literature described several theoretical models for describing partnership between the public and nonprofit sectors and provide insights into approaches and factors associated with collaboration. Brinkerhoff (2002) noted that in the normative view, partnerships would maximize equity and inclusiveness and engage organizations that can contribute to delivery of a given government service. In this model, there is equality and reciprocal accountability. She described an alternative view which looks at partnerships as a means to achieve objectives, and highlights efficiency, effectiveness, and responsiveness (Brinkerhoff, 2002). Another approach looked at less formal partnership structures and addresses autonomy, corporate citizenship, and independent decision making (Brinkerhoff, 2002). The final approach, network theory, looked at coordination challenges, various structures, and incentive structures between public and private organizations (Brinkerhoff, 2002). Chapman and Varda (2017) defined networks as cross-sectoral interactions to achieve a goal without a hierarchical structure. They noted that these are common in public health efforts such as reducing tobacco use (Chapman & Varda, 2017). Network theory also underlies the work done by Kuducu in studying nonprofit contributions to emergency response (Kuducu, 2006; Kuducu, 2007). Chapman and Varda

(2017) noted that inclusion of nonprofits in such public health networks is increasing.

Reasons include a recognition of the ability of nonprofits to make a unique contribution including provision of volunteers and other resources (Chapman & Varda, 2017).

Characteristics of Public-Nonprofit Partnerships

Based on a review of the literature on collaboration, Bryson, Crosby and Stone (2006) developed 22 propositions that characterize cross-sector collaborations and consider outcomes and accountabilities, initial conditions, governance, processes, and constraints. Among the factors that are thought to promote success are the presence of linkages including dedicated sponsors and champions, an agreement on the problem, and pre-existing networks (Bryson, Crosby, & Stone, 2006). Other factors affecting success are the presence of trust building activities, development of measures to handle conflict and balance power, use of both advance and emergency planning, and a focus on building upon the strengths of collaborators. They highlighted the important influence of environmental factors, over which leaders have little control, to the collaboration (Bryson, Crosby, & Stone, 2006).

Gazley and Brudney (2007) surveyed both nonprofit and public leaders in Georgia about existence, scope, and accomplishments of collaborations between the sectors. They reported that 54.3% of government leaders at the county or city level reported working with nonprofits and 49.8% of nonprofit leaders reported working with government. Leaders of both sectors reported both advantages and disadvantages to collaboration. A majority of public and nonprofit leaders cited improvement of service quality, improvement in community's access to service, and building a stronger community at (Gazley & Brudney, 2007). Nonprofit leaders

also rated ability to fulfill its mission highly (67.2%) (Gazley & Brudney, 2007). Gazley and Brudney (2007) described downsides to collaboration including quality of relations and organization capacity. Gazley and Brudney (2007) found that nonprofit executives are more likely than government leaders to cite obstacles to collaboration and that nonprofit executives with experience in collaboration had more concerns about drawbacks than those without experience.

A report by Guo and Acar (2005) looked at factors among 95 urban charities to determine factors associated with collaboration. Factors identified included organizations with a larger budget, receipt of, but not dependence on, government funding, and linkages via Board members to other nonprofits (Guo and Acar, 2005). Those not in the social services or educational areas were also more likely to collaborate (Guo and Acar, 2005).

Brinkerhoff (2002) looked at dimensions of partnerships in terms of mutuality vs. organizational identity. She defined organizational identity as the ability to maintain core values and constituents and the extent to which a nonprofit can remain true to mission, values, and constituencies. In the context of public-nonprofit partnerships, it includes the maintenance of characteristics of the nonprofit sector, including the engagement of others in partnerships. (Brinkerhoff 2002). She noted that nonprofits can bring social connectedness, flexibility, responsiveness, and innovation while the government provides overarching framework, ability to scale, and financial resources. A nonprofit collaboration with a mutuality high level promotes equity and fairness. As a result of fewer constraints the nonprofit can contribute skills and advantages and to bring up new ideas and approaches (Brinkerhoff, 2002).

Partnerships During Emergencies

As Simo and Bies (2007) stated, different underlying conditions found in an emergency response can change applicability of experiences or models for public – nonprofit collaboration. They described cross-sector collaboration as partnerships among businesses, nonprofit, communities and the public working toward a common goal. The collaboration structures ranged from unstructured and episodic to formal contracts (Simo & Bies, 2007).

Kapucu (2007) noted that in the response to the attacks of 9/11, networks occurred between nearby and similar organizations, but did not necessarily improve response. (Kapucu 2007). In an analysis of response efforts in New Orleans after Hurricane Katrina, Burns and Thomas (2006) described how a coalition of nonprofits tried to take over government functions through issue-based coalitions. These coalitions failed to meet the community's needs (Burns & Thomas, 2006). Stys (2011) described how the willingness of nonprofits to expand work in emergency varies and noted that many nonprofits don't have a plan to continue their own operations during a response.

Cultural and Tactical Differences

One of the strengths of nonprofits is their dedication to support the mission and to have a number of, and diversity in, resources (Chapman & Varda, 2017). They noted that nonprofits, with their emphasis on mission, can bring a leadership role to the public health network and keep it focused on mission (Chapman & Varda, 2017). However, as outlined by Gazley and Brudney (2007), not all nonprofits will find their missions aligned with public actions and will not be interested in a partnership.

Another strength of nonprofits as noted by Kapucu, Yuldashev, and Felheim (2017) is that nonprofits usually work at the personal level. These relationships will be important in decision making and sharing resources and expertise. Chapman and Varda (2017) also noted the importance of funding, including government funding, to nonprofits.

Some nonprofit approaches can hamper their participation in response. Stys (2011) noted that nonprofits have a pay as you go philosophy, which might lessen opportunities for collaboration. He described little coordination within the nonprofit sector and a limited ability or familiarity with efficiency and efficacy in some organizations. Stys (2011) described how the nonprofit culture of consensus driven work and equal access to inputs can be time consuming in development of a coordination effort. Stone (2009) related that among nonprofits, there is a culture or accepted practice of pass-offs to other nonprofits to complete the work (2009). This tradition might also made an assessment of efficiency and effectiveness difficult.

Unique Abilities of Nonprofits

One characteristic noted about nonprofits is their flexibility. Simo and Bies (2007) noted that after Hurricane Katrina, a lack of government infrastructure resulted in a dependence on nonprofit engagement in public planning and meeting basic human services. Stone (2009) described the less hierarchical nonprofit structure and abilities to respond quickly as a characteristic of nonprofits. In addition to mobilizing people, resources, facilities and services rapidly, Stys (2011) noted that nonprofits can have structures or buildings as locations for delivery of emergency services and have vans and automobiles to address transportation needs.

Stone (2009), in referencing the Urban Institute's *Partnership for Parks*, noted that nonprofits can access funding sources including individual donors, philanthropies and the private sector, that are not available to the public sector and have greater latitude in developing innovative ideas and new programs. Stys (2011) reported that established collaboratives or consortia might be favored by donors and philanthropic organizations looking to give donations in long term recovery efforts.

Stys (2011) noted that nonprofits can provide situational awareness for both planning and response work, help communications with populations with limited literacy or English language capability, and help monitor the situation among vulnerable populations. He described important roles for nonprofits in providing support services, e.g., child care or youth services for affected populations or responders, providing medical and mental health services, and monitoring vulnerable populations such as the disabled (Stys, 2011).

Chapman and Varda's (2017) study of public health networks identified six types of resources that nonprofits provided more frequently than the for profit or public participants in the networks. These included advocacy, leadership, health expertise, volunteers, community connections, decision-making. Only the use of volunteers was a statistically significant difference. (Chapman & Varda, 2017).

Stys (2011) described the advantages of nonprofits as current positive relationships with government, established trust and experience working with community, and communications networks. Gazley and Brudney (2007) noted that collaboration with nonprofits can bring new

skills and approaches to a problem. However, as Stys (2011) reported, each nonprofit has a unique profile and ability to participate in a response.

Role of Nonprofits in Response

As noted by Kapucu, Yuldashev, and Felheim (2017), there is an historic role for nonprofits in emergencies (Stone (2009) notes that nonprofits have the flexibility to try out new programs and develop innovative ideas. Kapucu (2006) noted that partnerships of government and nonprofits are important in response. He added that the ability to design an effective strategy for collaboration is particularly challenging in the dynamic environment of an emergency. As the disaster environment brings challenges of uncertainty, need for coordination and need for information. (Kapucu, 2006).

Kapucu, Yuldashev, and Felheim (2017) note the importance of the American Red Cross in immediate response: it serves as a representative of nonprofits in the Federal Response plan, and provide services such as shelter, food, and emergency relief items. Other nonprofits have less prominent roles. The National Voluntary Organizations Active in Disasters (NVOAD) was founded to help prevent duplication of services and promote sharing information among nonprofits and community with public. (National Voluntary Organizations Active in Disasters, 2014). Kapucu, Yuldashev, and Felheim (2017) performed a network analysis at the roles of NVOAD in emergencies, using Katrina and 9/11 as study points. Results showed increased involvement of NVOAD members during responses (increased involvement) (Kapucu, Yuldashev, & Felheim, 2017).

Stone (2009) noted that in a public-nonprofit collaboration that the public needs to consider what specific role(s) a nonprofit will have. He noted that a nonprofit might partner with other nonprofits to get the work done, which complicates the assessment of efficiency and accountability. Stone noted that urgency might balance out accountability (Stone, 2009).

Gazley and Brudney (2007) cited the literature that potential benefits of collaboration include addressing problems more effectively, saving resources, higher quality of service, distribution of risk. Collaboration might also promote accountability by an increased ability of the public sector to achieve the expected goals. Overall, a common theme was that collaboration buffers uncertainties that can affect accomplishments of goals.

Nonprofits can also contribute to a public health emergency response by continuing their usual work or by expanding their capability. Stys (2011) noted that traditional organizations might continue their usual work throughout a response, e .g., Meals on Wheels, and also address expansion of needs and new clients. Partnerships with nonprofits serving basic human needs might be particularly important as the response turns to recovery.

Simo and Bies (2007) reviewed roles of nonprofits during the responses to Hurricanes Katrina and Rita. Examples of nonprofits facilitating response included: nonprofit leaders assuming positions of leadership and trust in devastated communities; nonprofit development of funding mechanisms to expedite collection and use of funds; the ability of nonprofits to use resources, including volunteers, in the early phases of a response; the comfort of donors with existing organizations responding to the emergency (Simo & Bies, 2007).

Bryson, Crosby, and Stone (2006) suggested that establishment of partnerships should consider process steps in setting up agreements. These steps include: a formal agreement, established champions or formal/informal leaders, establishment of the collaboration as a viable entity, activities to build trust, plan to manage conflicts, analyses of whether stakeholder needs are being met, plan for how collaboration will work (Bryson, Crosby & Stone, 2006).

Opportunities

Brinkerhoff (2002) noted that a factor in the success of partnerships is the extent to which a nonprofit can remain true to its mission, values, and constituencies. She described that nonprofits can bring social connectedness, flexibility, responsiveness, and innovation, with the government's providing an overarching framework, ability to scale, and financial resources (Brinkerhoff, 2002). If the collaboration with nonprofits emphasizes mutuality at a high level, it will be easier for a nonprofit to contribute skills and to bring up new ideas and approaches (Brinkerhoff, 2002). Busch and Givens (2013) noted the importance of a definition of expectations in public-private partnerships to help avoid inter-organizational conflict and build trust.

Chapman and Varda (2017) described how historically nonprofits are seen as support organizations for networks as opposed to key players in a public health network. They proposed that the focus of nonprofits on the mission could result in an important leadership role and help focus the work on the mission or goal (Chapman & Varda, 2017).

As described by Busch and Givens (2013), one of the benefits of public-private partnerships can be the freeing up of government resources by tasking out some responsibilities to the private sector. This tasking can result in greater government efficiency (Busch & Givens, 2013). Stone (2009) noted that another role for nonprofits is in planning. Stys (2011) noted that engagement of the nonprofit sector in planning often does not occur, or is limited to large nonprofits, e.g. Salvation Army and Red Cross. Larger agencies such as the Red Cross, Salvation Army, and religiously affiliated organizations such as the United Methodist Committee on Relief and Lutheran Disaster Response, have commitments at the national level and some local members are very engaged (Stys, 2011). Simo and Bies (2007) described how nonprofits without an alignment with a larger organization had difficulty developing a more organized strategy and how larger nonprofits or central organizations such as religious organizations can play a coordinating role for smaller nonprofits.

Stys (2011) recommended several steps to advance nonprofit engagement in response and recovery. These included: nonprofit planning for disasters, nonprofit development of connections to emergency planners and engagement in overall response planning, development of a network for two-way communication; consideration of pre-event government funding for nonprofit coordination, and assurance of appropriate legal mechanisms to support nonprofit participation in planning and response (Stys, 2011).

Stys (2011) referred to VOADs (Voluntary Organizations Active in Disasters) as an example of nonprofit coordination. As noted on their website, the Mission Statement of the National VOAD is “an association of organizations that mitigates and alleviates the impact of

disasters, provides a forum promoting cooperation, communication, coordination, and collaboration; and foster more effective delivery of services to communities affected by disaster” (National Voluntary Organizations Active in Disaster, 2014). Members of VOADS are often from large disaster organizations and can have local representatives of faith-based groups. VOADS differ; some are 501(c)3 organizations and others not (Stys 2011). Members of a VOAD might respond individually if group does not (Stys, 2011). Stone notes that VOADS are in a position to lobby for funding for their partnership organizations.

Kapucu, Yuldashev, and Felheim (2017) proposed a model for improving nonprofit collaboration. The model suggested that in the planning phase, work would focus on clarifying roles, building capacity, and developing networks. Like VOADS, the focus would be on communication, collaboration, coordination, and cooperation. Sharing of risk, information, resources, commitment and social capital are other characteristics of the response (Kapucu, Yuldashev, & Felheim (2017)

Two examples highlight how partnerships can strengthen public health planning and response by providing services. During the Thomas Fire and subsequent mudslides in Santa Barbara in 2017-2018, several nonprofits played important roles in the public health response. As Charlton (2018) reported, one of the nonprofits, Direct Relief, a nonprofit which works in domestic and international settings, distributed 100,000 respirators from their own stockpile. Direct Relief routinely participates in local drills and trainings in Santa Barbara (Charlton, 2018). Charlton (2018) also reported how Easy Lift, another nonprofit, played an important role in assuring transportation for dialysis patients. Stone (2009) reported that the American Red

Cross provided the business aspects for hurricane training activities for 5,000 residents for the government's emergency manager of Miami/Dade County. He further noted that the county's emergency manager cited the ability of the Red Cross to find private sector sponsors and to readily free up money to handle the logistics of the training (Stone, 2009).

Concerns and Challenges

Stys (2011) noted that unrealistic expectations may exist in a public-nonprofit collaboration. He described that within a given area, there might be many nonprofits able to provide a service, but they are not organized (Stys, 2011). A lack of coordination was reported by Kapucu in his review of nonprofit work following the 9/11 attacks (Kapucu, 2007). Kapucu (2007) reported that nonprofits identified drawbacks to collaborating with other organizations including lack of communication, lack of common priorities, sizes of organizations, lack of experience, and a lack of trust.

Busch and Givens (2013), in looking at diversion of roles to the private sector, noted that government sharing of responsibilities can lead to an erosion of the government's capability to provide a service. Transfer of services from the government to outside sources can also result in problems with accountability (Busch & Givens, 2013, Gazley & Brudney, 2007). Busch and Givens (2013) also noted the importance of government having managers who are partnership oriented.

Kapucu (2006) described the government perspective on challenges or perceptions to the use of nonprofit organizations in response. Concerns include a lack of confidence in the abilities and resources of volunteers, legal liability for volunteers' actions, concerns about

interference of volunteers with other response efforts, and mistrust of volunteers' intentions (Kapucu, 2006)

Stone (2009) described that in a public-nonprofit collaboration that the public needs to consider what specific role(s) a nonprofit will have and that nonprofits might approach a problem differently from the public sector, e.g., partnering with other nonprofits to get the work done. He noted that this can lead to concerns about a nonprofit's efficiency and accountability and that there is a balance of urgency and accountability (Stone 2009). Busch and Givens (2013) also noted the challenges of accountability in a public-private partnership and stressed the importance of management and oversight of the activities.

Collaboration can also bring challenges to nonprofits. Potential challenges to nonprofits include mission drift, loss of autonomy, institutional costs of collaborative activities, and financial instability (Gazley & Brudney 2007). Stys (2011) noted the nonprofits themselves could be affected by disaster, including loss of resources such as people and buildings. Nonprofits might not have their own plans for continuity of operations or the capability to expand services, e.g., insufficient staff to meet a demand for services (Stys, 2011). In a report on the experiences of nonprofits responding after the 9/11 attacks, Kapucu (2007) described a lack of infrastructure, including a lack of reliable phone, email and web services.

Meyer-Emerick and Momen (2003) developed an approach to continuity and disaster planning for nonprofits (2003). They acknowledged the difficulties that nonprofits have in supporting planning efforts, but described the importance of having capabilities such as backup of data, reviews of insurance policies to define the events that are covered, and plans for loss of

power or of facilities. Chikoto, Sadiq and Fordych (2013) noted that nonprofits with more unrestricted income might be more able to spend funds on preparing for disasters. In a study of disaster preparedness using self-reported data from 34 nonprofits in Memphis, Chikoto, Sadiq, and Fordych (2013) found that having attended a disaster meeting or training course outside the organization was the most likely (82.4%) followed by mentioning a potential disaster in a meeting (76.5%) and holding a disaster related training within the organization and discussed short term responses to a disaster (73.5% each). Only 32.4% of nonprofits reported engaging in structural mitigation measures (Chikoto, Sadiq, & Fordych, 2013).

Long Term Impacts of Collaboration

While this paper focuses on the immediate time of a public health response, several authors have addressed the importance of immediate response activities for recovery, in particular those activities that build a resilient community. Kapucu and Sadiq (2016) described an increasing emphasis on development of community resilience to reduce vulnerabilities and lessen impact of disasters and on the importance of both formal and informal networks.

Busch and Givens (2013) noted that public-private partnerships built during a response can continue and improve a community's resilience. Factors to consider in continuing the collaboration include incentives, drawbacks, and social factors, such as) clearly defined expectations, shared values such as honesty, respect and trust and use of defined approaches in decision making (Busch & Givens, 2013). Stys (2011) reported, collaborations can help build resilient communities, freeing- up government time for strategic evaluation and resulting in greater efficiency. As Kapucu (2006) noted, development of partnerships encourages capacity

building and better decision-making , engagement of the community, and enhanced commitment to programs and goals.

However, not all nonprofits important in development of resilience will participate in an immediate public health response. Simo and Bies (2007) noted that post disaster rebuilding might require outreach to individuals and other organizations not engaged in initial response.

Section 3: Methods and Approaches

Collection of primary data was done via interviews and completion of surveys. Four stakeholder groups were targeted to get a range of perspectives: CDC-Foundation, nonprofits, health officers from local health departments, and leaders from the CDC's Office of Public Health Preparedness and Response. At the CDC F, six members of the executive staff and three programmatic or analytic staff were interviewed. Expert interviews were also conducted with three representatives of the nonprofit sector and three county health officials. Of three leaders invited from CDC's OPHPR, two completed the interviews and surveys. A complete list of the experts is in Appendix A.

Interviews were conducted with individuals for 30-45 minutes either in-person or by phone. Interviews were targeted conversations which used the questions listed in Appendix B as a guide. Except where permission was obtained to use quotes from the interviews, all information is reported anonymously. All expert interviewees were asked to complete a table (Appendix C, Table 1) rating the importance of public health capabilities for nonprofit engagement. The scale ranged from 1(high priority) to 5 (lowest priority/not a priority). The

majority of the public health capabilities in the table were selected from those developed by the CDC as guidance for state and local jurisdictions who receive federal funding for public health preparedness and emergency response (Centers for Disease Control and Prevention [CDC], December 18, 2017). Two additional capabilities, vulnerable populations and ability to collect and spend funds rapidly, were added after conversations with executive staff from CDC. As an additional source of information on the majority of the capabilities, a copy of CDC's "At-A-Glance Description" of the CDC capabilities was provided to all respondents (CDC, n.d.) Eleven of seventeen experts completed this table. As only 1/3 of Health Officers and 2/3 of nonprofit experts completed the table, an analysis of subgroups was not possible.

In addition to the table rating the importance of public health capabilities for nonprofits, CDC-F staff and participants from CDC leadership were asked to complete two additional tables (Appendix C, Tables 2 and 3). Table 2 asked for priority ratings of the same capabilities, but related to CDC-F in terms of compliance with its mission; Table 3 requested ratings for importance of the capability in terms of priority areas in working with nonprofits for the CDC-F. Eight of eleven expert interviewees completed Tables 2 and 3.

Response from the tables were entered into Excel spreadsheets. Calculations of responses and generation of graphics were performed using Excel.

Section 4. Data Analysis

Interviews

There are different types of public health emergencies and responses. Some result from a loss of infrastructure, e.g., hurricanes, earthquakes, fires, while others are caused by diseases

have direct impact on the population, e.g., influenza. However, public health emergencies all result in a disruption in normal conditions and, if great enough, in a need to seek additional resources to support and deliver public health services and supplies. The interviews focused on the delivery of public health services at the level of service delivery, which in California is usually at the county level.

Strengths. Overall, the experts thought that nonprofits could have an important role in strengthening response in areas that were not being well addressed by the government. One area frequently mentioned by experts was the link of nonprofits to their communities. Nonprofits are considered to have knowledge of the communities being served, the history of approaches that have been tried to reach the community, and a trust relationship with the community. One expert considered this to be particularly important as emotional connections can be particularly important during times of social disruption.

Nonprofits are seen as a way to access vulnerable and hard to reach populations. Nonprofits were noted as having an important role in bi-directional communication between public health responders and community members. Nonprofits can communicate the “face of need,” which could augment fund-raising and help direct resources. Nonprofits were described as bringing dedication, heart, and value to the response. Communication about the extent of problems and emerging concerns can contribute to awareness of the situation and development of specific response activities. Communication by nonprofits of ongoing public health response efforts could bolster trust within communities and the public.

Nonprofits are also thought to potentially have an important role in delivery of services or goods to the person needing it. Nonprofits are thought to have knowledge of distribution channels. Nonprofit links to volunteer communities might strengthen their ability to harness a work force needed for delivery of goods and services. Nonprofits were thought to have more flexibility and to be able to respond more rapidly than government agencies and develop solutions in more innovative and creative ways.

The financial structure of nonprofits was also seen as a strength. Access to donors might result in fund-raising that could be quicker than getting government funds. Nonprofits can process donations of both cash and needed materials, e.g., respirators during a fire, or insect repellent during the Zika response. As opposed to public health governmental entities, nonprofits are not subject to rules about competing contracts for work needing to be contracted out.

Finally, each nonprofit is unique and was thought to have a skill set that could be used in response, e.g. a nonprofit could watch children of responders. While the discussion was focused on immediate response, experts noted that nonprofits might be able to be engaged in long term recovery and strengthening of resilience.

Weaknesses. Several experts noted the large number of nonprofits with varying capabilities. The large number of nonprofits brought up concerns about duplicative capabilities and competition among nonprofits for funding. They were also concerned about the culture of nonprofits and focus on revenue. Another financial concern was that nonprofits might not have

sufficient cash resources to participate in a response and could not assure needed cash flow. A nonprofit might consider its donor base in selecting which response work fits, as not all causes will resonate with donors.

Experts expressed concerns that nonprofits might not have their own plan to continue their existing operations in a disaster. They also expressed concerns about nonprofits' ability to coordinate response work within its own structure. Nonprofits might not be aware of their limitations and could have the potential to overpromise on capabilities. A nonprofit might not have a sense of the overall scope of the problem, the scope of the response, and an understanding or vision of a role for themselves in a public health response. Staff might lack needed skills or require additional training. If nonprofit staff were to be engaged in a response, they might not be familiar with how a response is run, i.e., usually by an incident command structure, with a well-defined hierarchy with specific tasks and responsibilities assigned to a specific position.

The nonprofit might not be big enough at the time to make an impact, and engagement in a response might result in mission creep. While a nonprofit's mission might not change, a change in its leadership might affect the commitment to participation in a public health response.

Opportunities. Experts recognized the ability of nonprofits to fill gaps in public health services, especially early in response. Experts mentioned procurement of supplies and provision of extra staff to supplement response as roles for nonprofits. Assistance with

transportation, logistics, and communication were noted as potential roles early in the response. Experts noted opportunities to help with two-way communication on the status of response. Experts noted that if usual communication channels, e.g., web-based communication, is disrupted, personal connections to community become more important.

One underlying factor in collaboration is the need for coordination ahead of an event and integration of the work of nonprofits into overall response. The collaboration should build on existing infrastructure and partnerships and use an integrated approach. Experts noted the importance of public health's helping nonprofits learn about response. They also noted that there might be several approaches to coordinating the work of nonprofits, e.g., a local nonprofit that can play a coordinating role. Larger nonprofits with a broader scope might be able to create a vision into which other nonprofits can fit. Others noted that local nonprofits could benefit from their connections to national organizations. One expert noted that roles for nonprofits might vary given the size of the public health department and the range of services it provides. For health departments with limited staff, a nonprofit might provide staff to supplement those at the public health agency.

Collaboration could lead to a new perspectives on the response. Nonprofits might be better at seeing the complexity of the situation and providing insights and a better understanding of the situation. Nonprofits might also be a source of volunteers; however, these volunteers might need additional training and vetting. Nonprofits might bring a new set of skills or a focus on services not readily provided by the public sector, e.g., nonprofits who can

provide counseling services or household goods and clothing to address basic human needs. Nonprofit collaboration can also result in a hybrid approach to services, e.g., collaboration of nonprofit and private health care clinics to provide services.

One respondent noted that nonprofits do not have to play a big role in response itself, but can contribute to the response by maintaining a sense of community and keeping up morale. Nonprofits also can tell stories to bring in resources. Fundraising by nonprofits might provide a way for donors to feel more engaged in response. The ability to receive and spend new funds on response activities is another important opportunity for nonprofits.

One expert noted that nonprofits could benefit from a creation of a “sense of place” for nonprofits in response. The CDC Foundation, with its national scope, might be able to serve as a convening role to improve coordination with other organizations.

Threats. Threats to a successful collaboration included concerns about assurance of accountability, in particular an assurance that due process is followed. Concerns included potential problems with assessment of effectiveness and assurance that the work is being completed in an acceptable and timely way. An inability to measure effectiveness was thought as having the potential to undermine the partnership.

Another threat to collaboration is over-commitment of capabilities by a nonprofit. One particular concern is that the commitment to the response work might be secondary if the work is seen by a nonprofit as an opportunity to grow its business.

Several factors related to coordination were mentioned as threats to collaboration. Experts noted the need for clear vision of what needs to be done and the roles for each organization. Experts expressed concern about duplication and confusion, and noted that the involvement of another sector complicates response. Integration of a nonprofit representative into the overall response structure might be beneficial, but could also be disruptive if the response structure is not followed.

Other threats include a potential lack of legal protections and insurance coverage for nonprofit activity. Concerns about reimbursement and legal protections might be addressed by establishment of a Memorandum of Understanding (MOUs). One expert noted that there might be increased scrutiny of work done by nonprofits in an area usually done by government agencies.

Experts noted that nonprofits good in at providing services in an initial response might not be good for long term response. Development of collaborations for a long term response or recovery might involve different nonprofits.

SWOT Analysis

While experts had individual ideas for strengths, weaknesses, opportunities and threats in development of collaboration between governmental public health and nonprofits, within each category a few themes emerged:

- Strengths. Flexibility, in particular financial. Ability to connect to community and be a vital link in communications.

- Weaknesses. Nonprofits not ready for disaster themselves and not understand how they could contribute to a wider response. Response work might be seen as a culture shift or as not fitting with the mission.
- Opportunities. Focus on work that government cannot readily do, thus freeing up government to have additional resources to spend on strategy. Need for coordination and planning.
- Threats. Complexity of response during a time of disruption in social structure. Assurance of legal protections, a lack of effective performance measures, and over-commitment by the nonprofit were also threats.

A summary of the SWOT analysis can be found in Figure 1. The SWOT analysis includes information from the expert interviews and from the review of the literature.

Figure 1. SWOT analysis of collaborations with nonprofits in public health response at the level of service delivery.

SWOT ANALYSIS

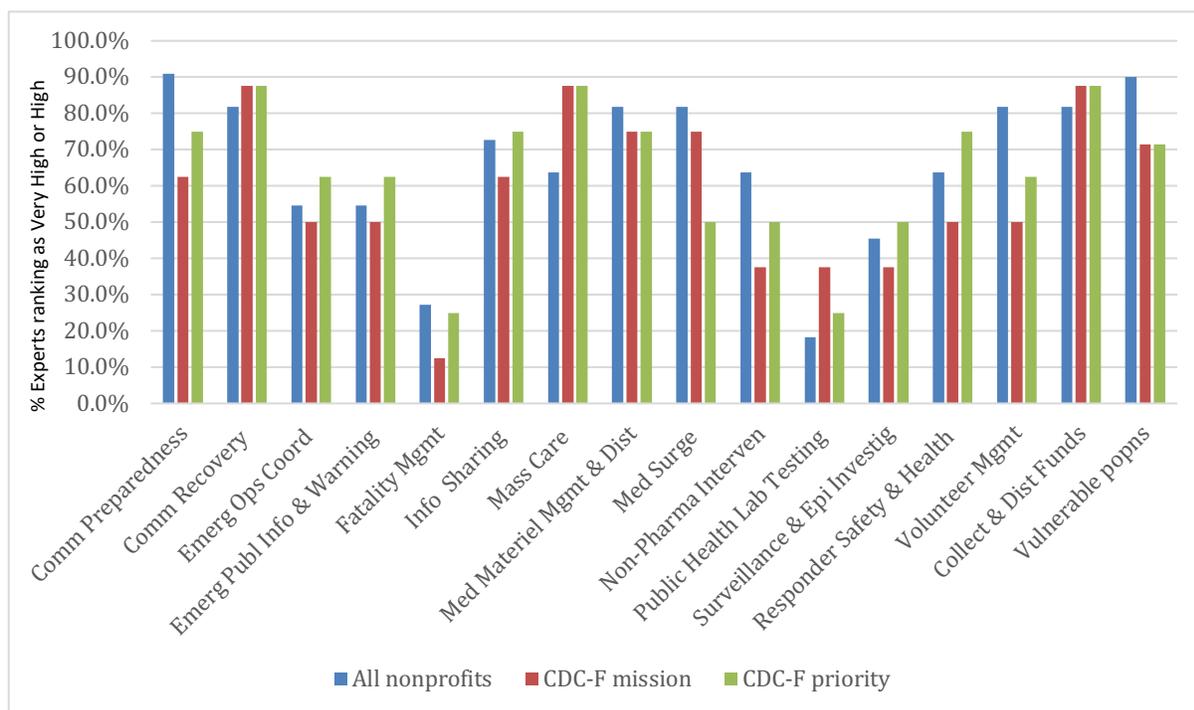
INTERNAL FACTORS	
STRENGTHS (+)	WEAKNESSES (-)
<ul style="list-style-type: none"> • Flexibility in organizational structure • Knowledge of community with insights into needs/approaches • Community value and trust • Existence on front line = speedy implementation • Volunteer base • Fundraising base • Existing physical infrastructure 	<ul style="list-style-type: none"> • Unfamiliarity with incident response • Lack of emergency plan for itself • Incapable of moving money quickly • Inability to use surge resources (money or staff) • Overestimated capabilities • Impact of disaster may limit capabilities • Imperfect match of skills • Cultural differences, including accountability.
EXTERNAL FACTORS	
OPPORTUNITIES (+)	THREATS (-)
<ul style="list-style-type: none"> • Ability of government to focus on strategy • Path to difficult to reach communities • Increased community engagement • Established relationships appeal to donors • Improved community resilience • Insights into new strategies • Improved decisions on delivery of goods & services • Additional source of information on situational awareness 	<ul style="list-style-type: none"> • Confusion <ul style="list-style-type: none"> ○ Lack of accountability ○ Lack of transparency ○ Difficulty in assurance of efficacy and efficiency ○ Missions not aligned • New relationships without base of trust • Erosion of government capability • Impact of disaster • Greater scrutiny for using non-governmental entities to do "government" work

Survey results

Surveys suggested an important role for nonprofits in carrying out most of the capabilities. Only three areas, public health laboratory and testing, fatality management, and surveillance and epidemiologic investigation, were not ranked as a priority by $\geq 50\%$ of the respondents (Figure 2). These activities were also listed as a low priority for the CDC-F in terms of its mission and its work with nonprofits. These activities require specific skills and infrastructure, a factor that might contribute to the score. Among the remainder of the scores,

highest priority for all nonprofits was for community preparedness and work with vulnerable populations (Table 1). These survey results are in keeping with the findings of the interviews that nonprofit organizations bring value in their flexibility, ability to respond rapidly, and community connections.

Figure 2. Expert ranking of priorities of public health capabilities for engagement of nonprofits and the CDC-Foundation in an emergency response.



In looking at the priorities for the CDC-F in carrying out its mission in a public health emergency response, the highest ranked activities were to collect and distribute funds , community recovery, and mass care (Table 1). Medical surge and medical materiel distribution were also high priorities. The pattern of responses for priorities for the CDC-F in working with nonprofits were identical to those for the CDC-F mission for the highest ranked capabilities. Other priority areas differed, with community preparedness, information sharing, medical

material distribution and responder health and safety having the highest priority

rankings for CDC work with nonprofits.

Table 1. Ranking of capabilities as a priority by experts. Highest ranked capabilities for all nonprofits, the CDC-F's mission, and CDC-F's work with nonprofits.

Capability Rank	All nonprofits	CDC-Foundation work based on mission	CDC-Foundation work with nonprofits
1 (tie)	<ul style="list-style-type: none"> Community preparedness (91%) Vulnerable populations (90%) 	<ul style="list-style-type: none"> Collect & distribute funds (88%) Community recovery Mass care 	<ul style="list-style-type: none"> Collect & distribute funds (88%) Community recovery Mass care
2 (tie)	<ul style="list-style-type: none"> Community recovery (82%) Medical materiel distribution Medical surge Volunteer Management Collect & distribute funds 	<ul style="list-style-type: none"> Medical surge (75%) Medical materiel distribution 	<ul style="list-style-type: none"> Community preparedness (75%) Information sharing Medical materiel distribution Responder health & safety
3	Information sharing (73%)	Vulnerable populations (71%)	Vulnerable populations (71%)

Discussion

Partnerships between public health and the nonprofit sectors in emergencies. As noted in the different models in the literature, collaborations between the public sector and nonprofits should consider accountability, desired outcomes of the collaboration, autonomy,

incentives, and the structure of the relationships. Development of a public health-nonprofit collaboration needs to consider that a public health emergency is characterized by rapidly changing problems and concerns during a time of social disruption. Because of the complexity of the problems and involvement of numerous agencies, most government responses use highly organized structures to respond to emergencies. Working in an environment with clear roles and an emphasis on accountability could be a cultural shift for nonprofits. Those planning to engage nonprofits in a public health response need to address how nonprofits can add their unique contribution in such a dynamic, yet structured, environment. Beginning a collaboration and thinking about what type of relationship would balance these competing realities before an event would be beneficial.

The literature and experts noted that partnerships would benefit from early engagement of nonprofits and establishment of a trust relationship. Engagement of nonprofits in the planning process can help orient the nonprofits to their potential roles and contributions to the overall response and the actions they need to undertake to participate. There is little published literature evaluating role of nonprofits in public health response to guide this planning.

Nonprofit organizations contributions to public health emergency response.

Findings from the literature review on nonprofit roles in emergency response, the expert interviews, and survey results provide insights into areas where nonprofit work might be most needed or successful. High importance was placed on using the unique characteristics and roles

of nonprofits. These include flexibility of structure, ability to surge with people, the ability to receive and spend funds quickly, and relationships with communities.

Both the interviews and the literature suggested the importance of balancing the aspects of nonprofits that will bring a unique contribution to response, such as flexibility, connection to the community, and rapidity of response, with characteristics needed in a response including accountability and efficiency. Partnerships with government will bring an increased focus on accountability and effectiveness that might not be part of the existing culture of a nonprofit. As outlined in the *Whole Community Strategic Themes* proposed by FEMA, collaboration with nonprofits can help the public sector understand the community better, including its needs and capabilities; strengthen relationships with the community and its leaders; and promote local action (FEMA, 2011). The collaboration should strengthen the existing social infrastructure and its overall ability to respond. Bi-directional communication with delivery of public health messages to hard-to-reach communities and feedback on situational awareness to the response leadership about the needs of those communities can strengthen response.

During the interviews, several experts referred to the potential usefulness of a listing of factors for government agencies to consider in establishing partnerships with nonprofit organizations. A nascent list developed from the discussions can be found in Table 2. As the interviews were focused on the immediate response period, the factors are primarily meant for nonprofit roles in the early phase of a response. These factors can be considered a starting point for discussion; their value is limited by the small number of participants. While the list

includes perspectives of several key stakeholders, further development of the list by review and input from a much larger audience of stakeholders, including those groups engaged in this process, and those not, would add to its value.

Table 2. Considerations for selection of nonprofit collaborators in a public health response at the level of service delivery.

<p><u>Leadership</u></p> <ul style="list-style-type: none"> • Nonprofit leadership committed to goal • Values and composition of the Board • Alignment of mission statement with response needs <p><u>Status of plan development</u></p> <ul style="list-style-type: none"> • Nonprofit has a preparedness plan • Nonprofit has a strategy for its actions during a response <p><u>Finances and fundraising</u></p> <ul style="list-style-type: none"> • Fiscal stability of the nonprofit, stable cash flows, clean financial reports • Ratings on Guidestar • Range for administrative fees • Circle of influence (donors, partners, other stakeholders) • Ready pool of resources. Plan for raising funds quickly. • Link to a national organization <p><u>Accountability</u></p> <ul style="list-style-type: none"> • Track record of successful program implementation • Proposed collaboration similar to ongoing work • Alternatives if a nonprofit is unable to fulfill role • Vetting process for volunteers if plan to tap this resource • Worker protection policies in place <p><u>Community Engagement</u></p> <ul style="list-style-type: none"> • Demonstrated links to community • Relationship network • Track record of positive relationships and work in the community <p><u>Other</u></p> <ul style="list-style-type: none"> • Legal coverage for nonprofits for proposed collaboration • Liability issues • Local government's ability to move funds, or will the funds have to come from other sources • Need for Memoranda of Understanding for certain types of response work

Discussion with experts and the literature were developed into potential actions that local governments could take to reach out to nonprofits (Table 3). The table includes activities that would promote coordination during an emergency response and development of an overall stronger collaborative relationship. These suggested areas highlight the importance of work during the planning phase of a response.

Table 3. Potential actions to promote nonprofit collaboration in public health emergency response at the level of service delivery

<p>Coordination</p> <ul style="list-style-type: none"> • Develop a coordination structure for nonprofits engaged in a response that interfaces with public health. <ul style="list-style-type: none"> ○ Establish a nonprofit entity coordinating all nonprofit work ○ Establish a nonprofit liaison within an emergency operations center • Provide an orientation to public health emergency response and training for nonprofits interested in participation <p>Collaboration</p> <ul style="list-style-type: none"> • Develop a vision of what needs to be done and role of nonprofits. Invite stakeholders to participate in planning • Establish trust relationships with nonprofits • Continue involvement after initial outreach. Avoid starting over • Explore and address barriers to reimbursement of nonprofits by government. • Increase nonprofits' awareness of their response capabilities and weaknesses

While looking at the role nonprofits played in response, many articles highlighted the importance of nonprofits in recovery. Many of the characteristics of nonprofits might apply to their work in the recovery phase. It is important to note that nonprofits not engaging in immediate response might have an integral role in recovery.

Activities for CDC-Foundation. The survey suggests that most of the capabilities were seen as important areas for the CDC-F, both in carrying out its own mission and in its

collaboration with nonprofits. However, there were some differences in the priorities. The priority rankings placed work with nonprofits in community preparedness, information sharing, and responder health and safety at a higher level than for CDC's direct work in this area. This is congruent with the local level of response and the need for nonprofits to have accurate information.

Limitations

Limitations of the literature review include a limited number of articles in the academic literature. The literature would be strengthened by a review of successful collaborations with identification of common themes as well as a more rigorous report of the efficiency and efficacy of nonprofits in public health response.

Limitations of the primary data include the small number of expert interviews from only four stakeholder groups. The response rate in completing the tables was low and prevented additional analysis of the priority rankings by stakeholder groups. Further insights could be gained by seeking additional input not only from the stakeholders engaged in this project, but also from additional responders at the local level and at the state level. Interviews with selected nonprofits who have directly participated in a response would yield more in-depth information about the challenges of nonprofits in response. Another limitation is the potential difference in understanding of the scope of nonprofits, e.g., would this include large, well established entities such as not for profit hospitals?

While this paper focused on planning and response, partnerships formed during a response can become a platform for the work of recovery. While challenges and work will be

different in the recovery phase, it is important that short term work be leveraged for long term efforts, in particular in the development of community resilience.

Section 5: Implications and Recommendations

Nonprofits

Many nonprofits have not thought about their potential contribution to an emergency response, and have not planned for continuing routine operations in the event of an emergency. Nonprofits should have plans for what they will do in an emergency in terms of continuing operations and communicating with staff and clients or beneficiaries about the status of operations. Nonprofits should also consider if their mission is consistent with supporting a response and how they might surge resources and staff to help out with a public health emergency response.

Public health departments should consider what activities nonprofits could support in a public health response. Given the large number of nonprofits and the overlapping work and missions of the nonprofits, public health departments will need a plan for engagement of nonprofits in response. The list of considerations might be useful in organizing their evaluation of nonprofit participation. The list of next steps provides suggestions for actions to undertake. One potential next step for public health organizations is to establish a working relationship with nonprofits on one aspect of public health response, e.g., communications. This would develop public health's familiarity with nonprofits as a sector and provide direct experience with individual nonprofits and their strengths and weaknesses. An example of such a

collaboration would be to develop a communication plan with nonprofits to provide public health messages with content, format, and delivery methods appropriate for vulnerable or difficult to reach populations. The messages could relay urgent messages throughout the year, e.g., alerts on poor air quality, when persons highly susceptible to air pollution need to stay indoors or take other preventive measures. Use of the system throughout the year would give insights into working with the nonprofit and institutionalizing public health communication in their work.

CDC-Foundation

The results of this project provide information to the CDC-F to use in its development of its public health preparedness and response work. It provides a description of factors that could contribute to public-nonprofit interactions; these factors might extend to collaborations with nonprofits outside a response setting.

The paper is limited to work at the local level in response. CDC-F, as a national level organization, might consider how national level efforts, e.g. the role of national level organizations in local response, development coordination structures for nonprofits, could improve local response.

The following recommendations for the CDC-F flow from the literature review, expert interviews, and survey results:

- Consider priorities as CDC-F expands its work in public health emergency response.

These priorities may vary with the type of response.

- Review funding strategy and mechanisms to support rapid distribution of funds in an emergency
- Further develop list of concerns in concert with additional local public health and response staff, nonprofits, and other stakeholders. Consider further work with local level response staff and nonprofit organizations to develop more refined guidance or approaches for collaboration with nonprofits
- Consider development of approaches, e.g. use of the CDC-F website or blog, to share best practices and highlight examples of public-nonprofit collaboration
- Consider supporting pilot programs to demonstrate or promote public-nonprofit collaboration, e.g. communication efforts at the local level. Such pilot programs would allow establishment of partnerships in a non-emergent environment and allow an evaluation of the effectiveness of the collaboration.
- Review the potential for partnerships at the national level to support local health departments and front-line nonprofit work
- Identify priorities for additional work to evaluate and improve the roles of nonprofits in public health response.

Section 6: Conclusions

The literature review and expert interviews described important work that can be done by nonprofits in public health emergency response. While studies described characteristics of nonprofits and practices that might promote a successful public-nonprofit partnership in overall

response, none specifically evaluated the roles of nonprofits in public health emergency response. Practices or collaborations between public health and nonprofits have not been evaluated and successful approaches have not been distributed widely. Opportunities exist to move forward. Partnerships should build on the strengths of the different entities to maximize the performance of each. Inclusion of nonprofits during the planning phase, establishment of a trust relationship, clarifications of roles and expectations, and assurance of the capacity of nonprofits to carry out response work are important steps. Public health organizations should recognize that training nonprofit staff and supporting response planning by nonprofits is likely needed. Much work remains in integrating nonprofits into a public health emergency response. Additional studies and reports of effective approaches and successful collaborations are needed. CDC-F can play an important role in maintaining the momentum of more active engagement of nonprofits in public health response and in developing approaches to strengthen collaborative efforts such as information-sharing.

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Appendix A: List of Experts Interviewed

Foundation for the Centers for Disease Control and Prevention (CDC-F)

Laura Angel, Vice President for Advancement
Reema Bhakta, MPA, Senior Program Officer
Anne Blankinship, Research Analyst
Pierce Nelson, Vice President for Communications
Judy Monroe, MD, President and CEO
Turquoise Sidibe, MPH, Senior Program Office
Brandon Talley, MPH, Vice President for Programs
Alison Thompson, MPA, Associate Vice President for Advancement
Chloe Tonney, Chief Innovation and Strategy Officer

Centers for Disease Control and Prevention

Jeff Bryant, MS, MSS, Director of Emergency Operations, Office of Public Health
Preparedness and Response (OPHPR)
Stephen C. Redd, MD, Director, OPHPR

County Health Officers

Sara Cody, MD, County of Santa Clara
Muntu Davis MD, MPH, Alameda County
Charity Dean, MD, MPH, Santa Barbara County

Nonprofit organizations

Raymond Baxter, PhD, Board of Directors, CDC Foundation, Former Senior Vice-
President, Community Benefit, Research and Health Policy, Kaiser Permanente
Vincent Lafranza, EdD, CEO, National Network of Nonprofit Public Health Institutes
Mary Pittman, PhD, CEO, California Nonprofit Public Health Institute

Appendix B: List of Questions for Expert Interviews

Please think about both planning and immediate response.

Please try to apply your response to the level of service delivery, e.g., at local or state level..

What roles have you seen nonprofit organizations take in emergency response?

What roles do you think nonprofits are most suitable for performing (strengths)?

What types of coordination of nonprofit services are you aware of?

How would you promote collaboration with nonprofits?

What areas of response do you think need more attention?

What are the downsides to engagement of nonprofits?

How would you improve collaboration with/among nonprofits to provide front line response?.

Appendix C: Scoring of Public Health Capabilities

Table 1

Importance of Nonprofit Role in Public Health Emergency Response

This table measures the importance of nonprofit organizations in responding to a public health emergency. The areas of interest are those capabilities that are used to measure Public Health Emergency Preparedness of local jurisdictions funded by CDC. It also includes two capabilities that were thought to be particularly pertinent to nonprofit organizations.

The ratings in this Table should reflect your perspective of the potential or current role of nonprofits in detection and immediate response to a public health emergency.

Please circle the response that best correlates with your impression of the importance of nonprofit organizations in detection and immediate response to a public health emergency. If you are not familiar with a capability, please circle DNK.

For additional information, please see the email attachment describing the capabilities and what topics they encompass or contact Carol @ capertowski@dons.usfca.edu.

Capability	Rating 1= highest priority, 5= lowest or not a priority DNK = Do not know
Community Preparedness (The ability of communities to prepare for, respond to, and recover from, a public health incident [PHI])	1 2 3 4 5 DNK
Community Recovery (The ability of communities to collaborate with community partners to plan and rebuild public health and medical systems after a PHI)	1 2 3 4 5 DNK
Emergency Operations Coordination	1 2 3 4 5 DNK

(The ability to direct and support a response that is standardized, scalable, and consistent with national standards)	
Emergency Public Health Information and Warning (The ability to develop, communicate, and disseminate information to the public and responders)	1 2 3 4 5 DNK
Fatality Management (the ability to coordinate with partners to ensure proper handling, storage, and disposal of human remains and to provide mental health services to survivors, responders, and family members)	1 2 3 4 5 DNK
Information Sharing (The ability to share health and situational awareness data with other governmental jurisdictions and the private sector)	1 2 3 4 5 DNK
Medical Materiel Management and Distribution (The ability to acquire, maintain, transport, distribute, and track materials, e.g. gloves, needed to support a medical response)	1 2 3 4 5 DNK
Medical Surge (The ability to provide adequate medical evaluation and care during a PHI with demand exceeding the usual capability)	1 2 3 4 5 DNK
Non-pharmaceutical interventions (The ability to recommend and implement strategies for physical measures to control disease exposure or prevent injury, e.g. quarantines)	1 2 3 4 5 DNK
Public Health Laboratory Testing (The ability to detect and characterize exposure to biologic, chemical, and radiological agents)	1 2 3 4 5 DNK
Public Health Surveillance and Epidemiologic Investigations	1 2 3 4 5 DNK

(The ability to maintain surveillance systems and perform epidemiologic investigations)	
Responder Health and Safety (The ability to protect public health responders responding to a PHI and to support health and safety needs of medical personnel)	1 2 3 4 5 DNK
Volunteer Management (The ability to coordinate recruitment, training, and engagement of volunteers to support front-line public health response efforts)	1 2 3 4 5 DNK
Rapid Collection and Use of Funds (The ability to collect funds from public or private sources and spend them on public health response activities in a rapid manner)	1 2 3 4 5 DNK
Access to Vulnerable Populations (The ability to provide information or services to difficult to reach populations, e.g., homeless, immigrants)	1 2 3 4 5 DNK

Table 2

Importance to the CDC-F's Role in Response

This table measures the areas of public health emergency response that would be within the mission of the CDC-F. The following scale includes capabilities that are used to measure Public Health Emergency Preparedness of local jurisdictions funded by CDC. It adds two capabilities that were thought to be particularly pertinent to nonprofit organizations.

The ratings in Table 2 should reflect your perspective of how important the capability is to the potential role of the CDC-F in an emergency response, i.e., work in this capability is consistent with the CDC-F Mission.

Please circle the response that best correlates with your impression of the importance of the importance of the capability to the role of the CDC-F in an emergency response.

For additional information, please see the email attachment describing the capabilities and what topics they encompass or contact Carol @capertowski@dons.usfca.edu.

Capability	Rating 1= highest priority, 5= lowest or not a priority DNK = Do not know
Community Preparedness (The ability of communities to prepare for, respond to, and recover from, a public health incident [PHI])	1 2 3 4 5 DNK
Community Recovery (The ability of communities to collaborate with community partners to plan and rebuild public health and medical systems after a PHI)	1 2 3 4 5 DNK
Emergency Operations Coordination (The ability to direct and support a response that is standardized, scalable, and consistent with national standards)	1 2 3 4 5 DNK
Emergency Public Health Information and Warning (The ability to develop, communicate, and disseminate information to the public and responders)	1 2 3 4 5 DNK
Fatality Management (the ability to coordinate with partners to ensure proper handling, storage, and disposal of human remains and to provide mental health services to survivors, responders, and family members)	1 2 3 4 5 DNK
Information Sharing (The ability to share health and situational awareness data with other governmental jurisdictions and the private sector)	1 2 3 4 5 DNK
Mass Care	1 2 3 4 5 DNK

(The ability to partner with other organizations to address public health, medical and behavioral health needs of those impacted by a PHI)	
Medical Materiel Management and Distribution (The ability to acquire, maintain, transport, distribute, and track materials, e.g. gloves, needed to support a medical response)	1 2 3 4 5 DNK
Medical Surge (The ability to provide adequate medical evaluation and care during a PHI with demand exceeding the usual capability)	1 2 3 4 5 DNK
Non-pharmaceutical interventions (The ability to recommend and implement strategies for physical measures to control disease exposure or prevent injury, e.g. quarantines)	1 2 3 4 5 DNK
Public Health Laboratory Testing (The ability to detect and characterize exposure to biologic, chemical, and radiological agents)	1 2 3 4 5 DNK
Public Health Surveillance and Epidemiologic Investigations (The ability to maintain surveillance systems and perform epidemiologic investigations)	1 2 3 4 5 DNK
Responder Health and Safety (The ability to protect public health responders responding to a PHI and to support health and safety needs of medical personnel)	1 2 3 4 5 DNK
Volunteer Management (The ability to coordinate recruitment, training, and engagement of volunteers to support front-line public health response efforts)	1 2 3 4 5 DNK
Rapid Collection and Use of Funds (The ability to collect funds from public or private sources and spend it on public health response activities in a rapid manner)	1 2 3 4 5 DNK

<p>Access to Vulnerable Populations (The ability to provide information or services to difficult to reach populations, e.g., homeless, immigrants)</p>	<p>1 2 3 4 5 DNK</p>
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Table 3

Priority of Capability for Nonprofit Collaboration with CDC-F

This table assesses the priorities for the CDC-F's work with nonprofit organizations in public health emergency response. The following scale addresses capabilities that are used to measure Public Health Emergency Preparedness of local jurisdictions funded by CDC. It adds two capabilities that were thought to be particularly pertinent to nonprofit organizations.

The ratings in this Table should reflect your perspective of the priority for development of each capability to the CDC-F in its work supporting the detection and immediate response to a public health emergency.

Please circle the response that best correlates with your impression what priority should be assigned to the capability for CDC-F's work supporting detection and immediate response to a public health emergency at the front-line level. If you are not familiar with a capability, please circle DNK (Do Not Know).

For additional information, please see the email attachment describing the capabilities and what topics they encompass or contact Carol @capertowski@dons.usfca.edu.

<p>Capability</p>	<p>Rating 1= highest priority, 5= lowest or not a priority DNK = Do not know</p>
<p>Community Preparedness (The ability of communities to prepare for, respond to, and recover from, a public health incident [PHI])</p>	<p>1 2 3 4 5 DNK</p>

<p>Community Recovery</p> <p>(The ability of communities to collaborate with community partners to plan and rebuild public health and medical systems after a PHI)</p>	1	2	3	4	5	DNK
<p>Emergency Operations Coordination</p> <p>(The ability to direct and support a response that is standardized, scalable, and consistent with national standards)</p>	1	2	3	4	5	DNK
<p>Emergency Public Health Information and Warning</p> <p>(The ability to develop, communicate, and disseminate information to the public and responders)</p>	1	2	3	4	5	DNK
<p>Fatality Management</p> <p>(the ability to coordinate with partners to ensure proper handling, storage, and disposal of human remains and to provide mental health services to survivors, responders, and family members)</p>	1	2	3	4	5	DNK
<p>Information Sharing</p> <p>(The ability to share health and situational awareness data with other governmental jurisdictions and the private sector)</p>	1	2	3	4	5	DNK
<p>Mass Care</p> <p>(The ability to partner with other organizations to address public health, medical and behavioral health needs of those impacted by a PHI)</p>	1	2	3	4	5	DNK
<p>Medical Materiel Management and Distribution</p> <p>(The ability to acquire, maintain, transport, distribute, and track materials, e.g. gloves, needed to support a medical response)</p>	1	2	3	4	5	DNK
<p>Medical Surge</p> <p>(The ability to provide adequate medical evaluation and care during a PHI with demand exceeding the usual capability)</p>	1	2	3	4	5	DNK

<p>Non-pharmaceutical interventions (The ability to recommend and implement strategies for physical measures to control disease exposure or prevent injury, e.g. quarantines)</p>	1	2	3	4	5	DNK
<p>Public Health Laboratory Testing (The ability to detect and characterize exposure to biologic, chemical, and radiological agents)</p>	1	2	3	4	5	DNK
<p>Public Health Surveillance and Epidemiologic Investigations (The ability to maintain surveillance systems and perform epidemiologic investigations)</p>	1	2	3	4	5	DNK
<p>Responder Health and Safety (The ability to protect public health responders responding to a PHI and to support health and safety needs of medical personnel)</p>	1	2	3	4	5	DNK
<p>Volunteer Management (The ability to coordinate recruitment, training, and engagement of volunteers to support front-line public health response efforts)</p>	1	2	3	4	5	DNK
<p>Rapid Collection and Use of Funds (The ability to collect funds from public or private sources and spend it on public health response activities in a rapid manner)</p>	1	2	3	4	5	DNK
<p>Access to Vulnerable Populations (The ability to provide information or services to difficult to reach populations, e.g., homeless, immigrants)</p>	1	2	3	4	5	DNK

Author's Bio

Carol Pertowski is a public health physician and medical epidemiologist with 25 years of experience. Her background includes an undergraduate degree in public health, a medical degree, and an Internal Medicine residency. After completing the Epidemic Intelligence Service training and a Preventive Medicine residency at the Centers for Disease Control and Prevention (CDC), Carol joined the CDC staff and worked on outbreak investigations, disease tracking, public health preparedness and response, and communications in the United States and abroad. Her accomplishments include establishing a web based method for communication about emerging public health events, and responding to public health emergencies including pandemic influenza, anthrax, and carbon monoxide poisonings following hurricanes. Having retired from government service, Carol plans to work in public health with a focus on developing innovative approaches to decision making, funding, and program development in the nonprofit sector.