SAMHSA

Disaster Technical Assistance Center Supplemental Research Bulletin

Stronger Together: An In-Depth Look at Selected Community-Level Approaches to Disaster Behavioral Health
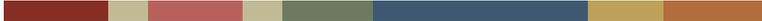
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CONTENTS

INTRODUCTION

This issue of the *Supplemental Research Bulletin* focuses on selected programs and approaches that can be used to help whole communities fare better during and after disasters in terms of behavioral health (mental health and substance use issues). The issue covers resilience-based approaches begun prior to a disaster; the Crisis Counseling Assistance and Training Program (CCP); and Psychological Simple Triage and Rapid Treatment (PsySTART).

Of course, this is by no means a comprehensive list of programs, approaches, and interventions that can be used around disasters to support behavioral health. Our goal in this issue is to look in depth at a subset of the rich range of approaches available, and to concentrate specifically on approaches for whole communities. For a list of disaster behavioral health interventions available, please refer to the issue of the *Supplemental Research Bulletin* published in May 2015: http://www.samhsa.gov/sites/default/files/dtac/supplemental-research-bulletin-may-2015-disaster-behavioral-health-interventions.pdf.

We chose the focus of this issue for several reasons. First, among entities within the U.S. Department of Health and Human Services (HHS), SAMHSA is charged with leading public health efforts to advance the behavioral health of the nation. The SAMHSA Disaster Technical Assistance Center (DTAC) handles one aspect of this mission: supporting states, territories, tribes, and localities in responding effectively to disasters from a behavioral health standpoint. SAMHSA DTAC is charged with work at the local level to improve behavioral health outcomes in the event of a disaster. Therefore, it is important that we provide disaster behavioral health leaders, planners, coordinators, and others with information about how to support communities in preparing for and responding to the behavioral health effects of disasters.

Also, mental health and substance use issues during and after disasters constitute a major public health concern. As noted in an article about a resilience-based approach, "There is overwhelming evidence that the majority of injuries or trauma in most disaster settings are psychological, as opposed to physical, with ratios ranging from 4:1 to as much as 50:1—ratios consistently reflected in the National Planning Scenarios" (Golan, Arad, Atsmon, Shemer, & Nehama, 1992; North et al., 1999; Schlenger et al., 2002; U.S. Department of Homeland Security, 2006; as cited in McCabe et al., 2014). Additionally, many people who develop new mental disorders after disasters or other traumas do not receive treatment in time to reduce distress or prevent disorder, and this happens in part because they are not identified and assessed in a timely manner (Wang et al., 2005; Norris, Friedman, & Watson, 2002; as cited in Schreiber, Yin, Omaish, & Broderick, 2014).

Conversely, community-focused approaches may be particularly effective in promoting the behavioral health of the public in the event of a disaster. They have certainly attracted policy focus and emphasis from the federal government in recent years. The U.S. government advocates a community-focused approach to disaster preparedness, response, and recovery. Signed in 2011, Presidential Policy Directive 8 involves a whole-community focus for preparedness and resiliency (U.S. Department of Homeland Security [DHS], Federal Emergency Management Agency [FEMA], 2015). In the *FEMA Strategic Plan 2014–2018,* the agency lists as a strategic imperative "a whole community approach to emergency management" (DHS, FEMA, 2014). And in the *National Health Security Strategy and Implementation Plan 2015–2018,* designed to ensure U.S. health security in the event of public health emergencies including natural and human-caused disasters, the HHS Office of the Assistant Secretary for Preparedness and Response identifies as its first strategic objective building and sustaining healthy, resilient communities.

APPROACHES TO BUILDING COMMUNITY RESILIENCE

In this section, we discuss approaches that focus on fostering and enhancing community resilience, defined as the "ability [of a community] to withstand and recover from a disaster" (Chandra et al., 2013). The approaches we cover focus on resilience in relation to disasters and other public health emergencies, but they do not focus exclusively on behavioral health. We examine them because empirical evidence has shown that connectedness to other people, including connection to one's community, improves behavioral health during and after disasters (Hobfoll et al., 2007; Norris & Stevens, 2007). Also, research has shown that people may experience more severe behavioral health issues in the event of a disaster if they lose access to resources, including the following:

- Object resources such as homes
- Relationships such as marriage
- Personal characteristics such as self-esteem
- Energies such as time and money (Hobfoll & Lilly, 1993; Norris et al., 2002)

Community disaster resilience may help prevent such loss and ensure greater access to resources for all community members (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008).
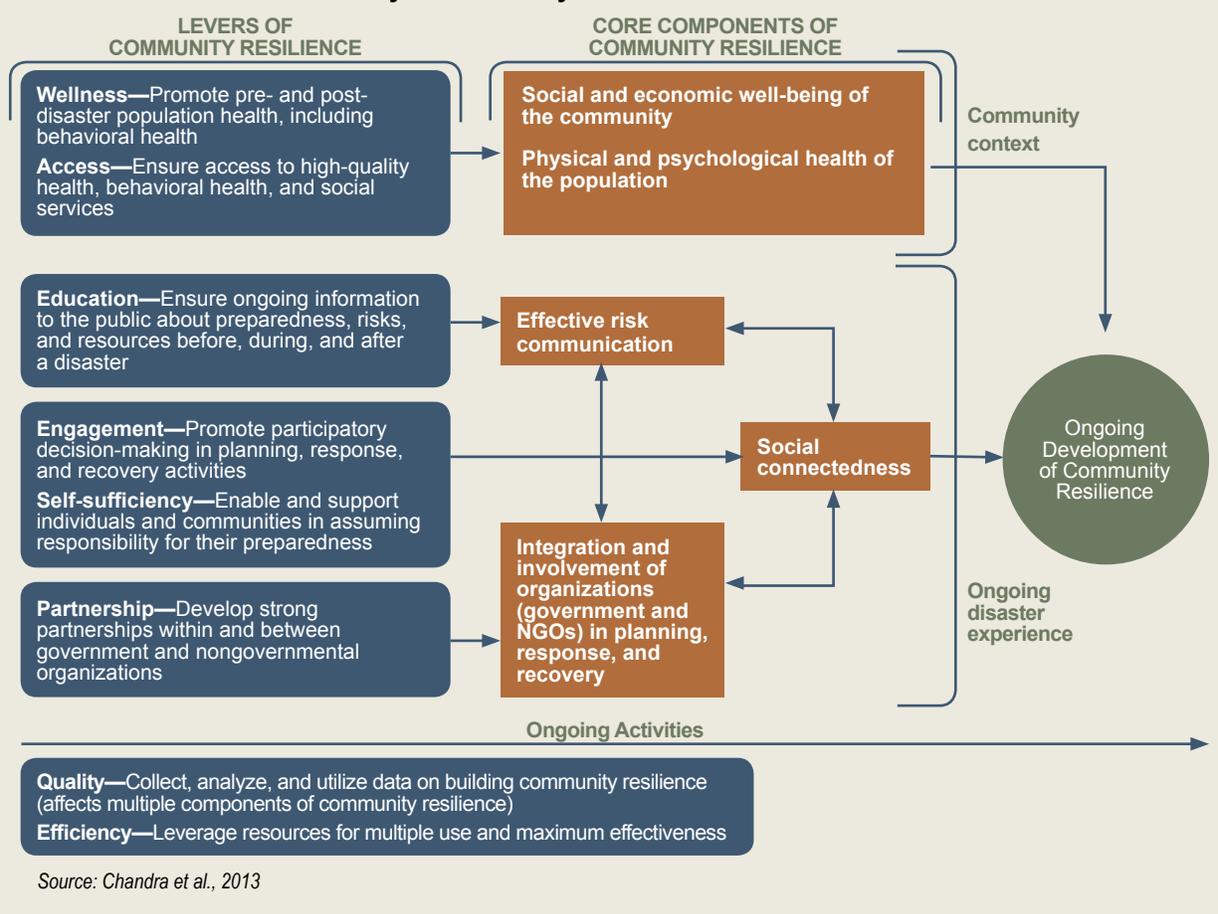
Los Angeles County Community Disaster Resilience Project

The Los Angeles County Department of Public Health (LACDPH) and several partners initiated the Los Angeles County Community Disaster Resilience (LACCDR) Project in 2010, with funding from a Centers for Disease Control and Prevention (CDC) Public Health Emergency Preparedness (PHEP) cooperative agreement, as well as from the National Institute of Mental Health and the Robert Wood Johnson Foundation. CDC's PHEP cooperative agreement program requires awardees—which include four major metropolitan areas, one of which is Los Angeles County in California, as well as all 50 U.S. states and several territories—to comply with CDC's public health preparedness capabilities, which were developed to help state and local health departments with strategic planning (HHS, CDC, 2011; Chandra et al., 2013). One of the six capabilities is community resilience, which includes both preparedness and recovery.

The LACCDR Project was begun to address a knowledge gap. Although the CDC PHEP cooperative agreement program and many other national and even international directives present disaster preparedness, response, and recovery as requiring a whole-community approach, "there are few evidence-based methods to building community resilience in the United States" (Schoch-Spana, Courtney, Franco, Norwood, & Nuzzo, 2008; as cited in Eisenman et al., 2014). Project leaders have sought to increase resilience in communities in Los Angeles County, and to do so in such a way that others working to build resilience in their own communities will have more information about what works, and what does not work, in fostering and enhancing disaster resilience at the community level.

The LACCDR Project is based on a conceptual model informed by previous work by several members of the project team. This work included a literature review and focus groups with stakeholders from government and nongovernmental organizations (NGOs). As shown in Figure 1, the model includes core components of community resilience, as well as levers, or actions to take to achieve and develop community resilience in terms of the core components. Please refer to Figure 1 for additional detail.

FIGURE 1. Model of community resilience by Chandra et al.

LEVERS OF COMMUNITY RESILIENCE

CORE COMPONENTS OF COMMUNITY RESILIENCE

Wellness—Promote pre- and post-disaster population health, including behavioral health

Access—Ensure access to high-quality health, behavioral health, and social services

Social and economic well-being of the community

Physical and psychological health of the population

Community context

Education—Ensure ongoing information to the public about preparedness, risks, and resources before, during, and after a disaster

Effective risk communication

Engagement—Promote participatory decision-making in planning, response, and recovery activities

Self-sufficiency—Enable and support individuals and communities in assuming responsibility for their preparedness

Social connectedness

Ongoing Development of Community Resilience

Partnership—Develop strong partnerships within and between government and nongovernmental organizations

Integration and involvement of organizations (government and NGOs) in planning, response, and recovery

Ongoing disaster experience

Ongoing Activities

Quality—Collect, analyze, and utilize data on building community resilience (affects multiple components of community resilience)

Efficiency—Leverage resources for multiple use and maximum effectiveness

Source: Chandra et al., 2013

Due to prioritization of levers based on discussions with stakeholders, the LACCDR Project focuses on four of the levers: education, engagement, self-sufficiency, and partnership (Chandra et al., 2013; Eisenman et al., 2014).

In the first 2 years of the project, LACDPH worked with individuals and organizations in multiple sectors to identify ways to increase resilience in communities in Los Angeles County in California. These entities represented the following sectors and areas:

- Academia (the University of California, Los Angeles; the RAND Corporation)
- Government (U.S. Geological Survey)
- Nonprofit organizations (the Emergency Network of Los Angeles, a local group of voluntary organizations active in disaster)
- Business
- The community

For the project itself, a division of LACDPH worked with community leaders to identify 16 communities that met several criteria (for example, "shared identity as a 'community' with at least two of the following: local business community; school/school district; police and fire department services; community clinic/hospital/health responsible entity; engaged community based organizations") (Eisenman et al., 2014).
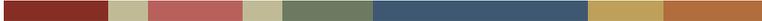
The communities were then paired based on demographics and risk factors, and one in each pair was assigned to the intervention condition, in this case community resilience, the other to the control condition.

Each community in the community resilience condition was assigned a public health nurse, who helped the community develop a community resilience coalition. These communities also had access to a community resilience toolkit, which included sections on Psychological First Aid, community mapping, and community engagement principles for resilience, as well as open source risk and resilience mapping software. Community resilience coalitions met monthly, with the public health nurses providing training on how to use the toolkit, and, based on this process, developed a community resilience work plan. Each community was given $15,000 for implementation of the work plan after the plan had been approved by LACDPH (Eisenman et al., 2014).

In the communities in the control condition, a public health nurse or health educator was assigned to develop a preparedness coalition. The public health nurse or health educator then trained the coalitions to increase disaster preparedness, which in the project focuses mainly on individual and family/household levels. These coalitions also developed work plans, and each also had $15,000 to implement the plan after the plan was approved (Eisenman et al., 2014).

The LACCDR Project involves several types of evaluation to see whether communities in the different conditions are proceeding differently in terms of developing and increasing resilience—and, if so, how:

- **Organizational network analysis,** or assessment of changes over time in linkages between community coalitions and NGOs in the 16 communities
- **Household and neighborhood-level preparedness and resilience,** and changes in these factors over time, as assessed via a population-based community resident survey administered at least twice across all 16 communities
- **Tabletop exercises** across all 16 coalitions
- **Process evaluation** to identify factors that promote the development and impact of community coalitions as fostering and fomenting development of resilience (Eisenman et al., 2014)

The LACCDR Project is still in process. Its website, http://www.laresilience.org, offers project materials including published research, a description of the conceptual model for the project, a listing of the 16 coalitions and an overview of their accomplishments, and the community resilience and preparedness toolkits they have used. Findings from evaluations have not yet been published.

Project To Test an Approach for Building Community Resilience

In this project, the Johns Hopkins Preparedness and Emergency Response Research Center (JH-PERRC) tested a model in which an academic center (JH-PERRC is part of the Johns Hopkins University Bloomberg School of Public Health) and its affiliates worked with local health departments (LHDs) and faith-based organizations (FBOs) to build capacity in communities to provide public mental health support after disasters and increase community disaster resilience. The project was conducted in part to determine whether an academic health center could engage LHDs and FBOs in collaboration, as well as whether LHDs could come up with ways to continue preparedness efforts with FBOs with which they had worked in the project. Essentially, project leaders wanted to examine whether this model could be used after this project to help communities increase their own mental health preparedness and overall resilience (McCabe et al., 2014).

The project was conducted in three phases:

- In the first phase, a pilot study was conducted in which early versions of Psychological First Aid (PFA) and Guided Preparedness Planning (GPP) training were provided to urban residents in Maryland. This phase did not involve LHD collaboration. The only assessment conducted was of participants' reactions to the training.
- In the second phase, revised versions of PFA and GPP training were provided to rural residents in Maryland, with collaboration of LHDs. Again, the only assessment was of participant reactions to the training.
- Phase 3 consisted of provision of final versions of PFA and GPP trainings provided to people in Maryland and two other states (Illinois and Iowa). Assessment in this phase included "assessments of pre- and post-training self-reports, objective tests, and behavioral indices of change in relevant knowledge, skills, and attitudes (KSAs)" (McCabe et al., 2014).

In each phase, PFA training was provided before GPP training.

FINDINGS

Researchers found that the partnership model central to the project was indeed viable—that is, many LHDs and FBOs in all phases participated (McCabe, Mosley et al., 2007; McCabe, Lating et al., 2007; McCabe et al., 2012; McCabe et al., 2011; McCabe et al., 2013; as cited in McCabe et al., 2014). They also found that the different types of organizations were able to define their roles in the project in early phases and work within these roles in later phases (McCabe et al., 2014).

Additionally, researchers found that several efforts were often necessary before FBOs agreed to participate in the project. They also found that it was important to have someone within the FBO who could serve as an advocate for participation: "Critical to securing leadership buy-in and ultimate approval for partnering was finding at least one advocate in the organization who could voice and model enthusiasm for the coventure" (McCabe et al., 2014). They note that traditional marketing and promotional strategies were useful with FBOs (e.g., email messages, bulletin inserts, flyers), but that "it was necessary to follow up on these activities with numerous personal contacts" (McCabe et al., 2014). They report encountering similar challenges in recruiting and retaining partners from LHDs.

In all phases of the project, most participants thought that it was beneficial to be trained first in PFA and then in GPP. According to a journal article describing the project, they "indicated that not only was PFA a critical hook that pulled them into the project in the first place, but it also raised their consciousness about the lack of preparedness planning in their community" (McCabe et al., 2014).

Beginning in the third phase of the project, when evaluation became more extensive, researchers assessed PFA and GPP training in part by comparing participants' responses to questions about training content; questions were presented before and after training. In this assessment, of 14 items to assess acquisition of PFA training content, 11 showed significant improvement in participant scores after the training. Of the 15 items to assess GPP content acquisition, there were significant improvements on eight of the items. Additionally, more than 90 percent of planning teams made disaster plans for their communities with the guidance of GPP training (McCabe et al., 2014).

Early in the project, researchers realized that LHDs and FBOs would benefit from guidance in continuing to work together after the project was complete. To provide some of this guidance, they asked LHD

partners to list ways to support ongoing contact between them and FBOs. Researchers used this list to create a checklist tool, which is now used at the end of the GPP workshop: LHD and FBO leaders review the checklist and identify the items they are willing to implement together in the year after the workshop.

There were also "translational impacts" of the project, with arrangements and changes to ensure ongoing collaboration between and among LHDs, FBOs, and the community at large in disaster preparedness and planning—and in other efforts. For example, "At the local level, one LHD leader (author Charlene Perry) now has in place a durable arrangement by which FBOs in her jurisdiction make their facilities accessible to disseminate public health messages and guidelines. During pandemic influenza A (H1N1), 22 FBOs operated as points of dispensing, where 536 people were vaccinated" (McCabe et al., 2014).

POST-DISASTER APPROACHES TO SUPPORTING COMMUNITY BEHAVIORAL HEALTH

In the sections that follow, we look in depth at approaches that assess and address behavioral health needs in communities affected by disaster. Both approaches take into account limited resources for behavioral health and other types of response.

### Crisis Counseling Assistance and Training Program

The Crisis Counseling Assistance and Training Program (CCP) is a U.S. government program to help individuals and communities recover from the challenging effects of natural and human-caused disasters. To that end, the CCP funds community-based individual crisis counseling, outreach, and psycho-educational services (HHS, SAMHSA, DTAC, 2016).

While states, territories, and federally recognized tribal organizations receive CCP grants after disasters, they use the CCP grant funding to support work done by providers at the local, community level. Therefore, the CCP is fundamentally a community-level approach to disaster behavioral health.

LEGAL AUTHORITIES AND PROGRAM STRUCTURE

Authorized in 1974 by the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended, 42 U.S.C. 5121 et seq.), the CCP is funded by FEMA and administered primarily by SAMHSA's Center for Mental Health Services (CMHS)—and, specifically, SAMHSA DTAC, which is part of CMHS (Norris & Bellamy, 2009; The Stafford Act, as Amended, 2013).

After a Presidential disaster declaration that includes individual assistance, a state, territory, or federally recognized tribe can apply for a CCP grant. The CCP comprises two grant programs: the Immediate Services Program (ISP), which runs for 60 days and is intended to provide support in the acute post-disaster phase, and the Regular Services Program (RSP), in which grants last for up to 9 months (HHS, SAMHSA, DTAC, 2016a, 2016b). Once a state, territory, or tribe has received an ISP or RSP grant, local provider organizations deliver program services, through behavioral health professional as well as paraprofessional employees (Norris, Hamblen, & Rosen, 2009). Specific trainings are required during the ISP and the RSP so that CCP employees understand the program philosophy and goals and are aware of techniques to promote the behavioral health of individuals and groups they serve, as well as to manage their own stress during their work (HHS, SAMHSA, DTAC, 2016b).
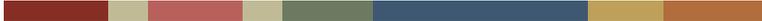
PROGRAM SCOPE AND SERVICES

CCPs provide a broad range of services, including brief educational or supportive contact; individual, family, and group crisis counseling; and assessment, referral, and resource linkage (HHS, SAMHSA, DTAC, 2016b). Services are provided where survivors live, work, worship, and take part in recreational and community activities (Norris & Bellamy, 2009).

In a commentary on a paper in which Hobfoll and colleagues identified five key evidence-based elements of post-disaster intervention, Norris and Stevens write, "If we were to design, from scratch, a program that conformed to Hobfoll and colleagues' framework in the United States, it might well resemble the Crisis Counseling Assistance and Training Program" (Norris & Stevens, 2007). (Hobfoll et al. [2007] identified the key elements as promoting a sense of safety, calm, self- and community efficacy, connectedness, and hope.)

The CCP is intended to address short-term needs of survivors (Norris, Hamblen, & Rosen, 2009). Services are strengths based—i.e., the CCP assumes that most survivors are naturally resilient—and provider organizations and employees are taught that crisis counseling within the context of a CCP differs from traditional psychotherapy in many ways (Norris & Bellamy, 2009; HHS, SAMHSA, DTAC, 2016b).

Programs are encouraged to link to behavioral health professionals and organizations to which they can refer survivors who are experiencing serious distress and diagnosable disorders (DHS, FEMA, & HHS, SAMHSA, CMHS, 2013). "As an essentially preventative approach, the CCP is not designed to deliver treatment," write Norris and Bellamy, in a report on evaluation across CCPs after Hurricane Katrina, "but there is an increasing effort to infuse evidence-based practices into CCP services. Policy-makers should consider wider implementation of specialized services in the aftermath of extreme events that have severe consequences for public mental health" (Norris & Bellamy, 2009).

DATA COLLECTION AND EVALUATION

Soon after Hurricane Katrina, SAMHSA CMHS implemented a standardized data collection system for CCPs (Norris & Bellamy, 2009). Designed to assess program reach, quality, and consistency, this system comprises several forms for tracking details of specific types of services provided, an online database for collection and aggregation of information, and a mobile app that has recently been launched for data collection in the field (HHS, SAMHSA, DTAC, 2016b). Individual CCP grant programs can use the evaluation tools to tailor their services over time to better meet the needs of their communities. FEMA, SAMHSA CMHS, and other entities use them to understand how the program is working as a whole, across sites and over time.

AN EVALUATION OF THE CCP: PROGRAM REACH

In 2009, Norris and Bellamy evaluated the reach of CCPs that were part of the response to Hurricane Katrina. In their paper describing the evaluation, they explain that after Hurricane Katrina, because of the intensity of the disaster and how many people it displaced, the federal government relaxed the CCP application requirement of a Presidential disaster declaration that includes individual assistance. More than 30 states applied for and received CCP ISP grants, and 18 applied for and received RSP grants.

Norris and Bellamy reviewed data from 19 CCPs over 16 months after Hurricane Katrina (from November 1, 2005, to February 28, 2007). They worked with data from 1.2 million encounters, including individual crisis counseling, group crisis counseling, and public education encounters. "Crisis counseling was defined as an encounter that lasted at least 15 minutes and involves participant engagement or disclosure,"
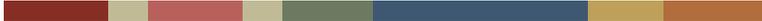
they write (Norris & Bellamy, 2009). They also describe encounters defined in these CCPs as group crisis counseling and public education: "Group crisis counseling (in which participants do most of the talking) and public education activities (in which counselors do most of the talking) were defined as interactions at least 15 minutes in length with two or more unrelated individuals" (Norris & Bellamy, 2009). Three CCPs were in states with disaster declarations, and 80 percent of total encounters in this study (936,000) came from these CCPs. Sixteen CCPs were in states without disaster declarations, and 20 percent of total encounters included in the study (237,000) came from these programs.

To understand program reach, Norris and Bellamy compared FEMA registrations for individual assistance by state (as a way to determine need) to the number of encounters in that state. While the relationship of FEMA registrations to encounters varied by state, Norris and Bellamy report that "in general, the distribution of encounters across states was highly consistent with the distribution of registrations (or need). Altogether, there were 1.2 CCP encounters for each FEMA application" (2009).

They found that service mix varied widely across CCPs. For example, across all programs, 56 percent of encounters were individual crisis counseling, but, among declared programs, percentages of individual crisis counseling ranged from 38 percent in Alabama to 76 percent in Mississippi.

Norris and Bellamy compared racial and ethnic data from individual CCP encounters (these data were not collected for group encounters) to census data to examine to what extent the race and ethnicity of those served by CCPs was proportional to racial and ethnic makeup of the communities where they were serving. They found that whites were underrepresented in the encounter data, and African American people were overrepresented. However, they point out, "this likely reflects the demographics of persons displaced by the flooding of New Orleans."

Additionally, they looked at risk factors: exposure to potentially traumatic events and experiences of loss. Because of how collection of these data works in the CCP—they are recorded only for individual encounters, and based on revelations during discussions; counselors are not supposed to ask about these factors—they are probably underestimated. Across programs, the researchers found that fully one-fifth of people had experienced one or more potentially traumatic events (e.g., family missing or dead, witnessed death or injury), and nearly 83 percent had experienced two or more losses (e.g., separation from loved one, displacement).

Norris and Bellamy conclude that "by the criteria used in these analyses, the reach of the national CCP was appropriately wide." They conclude this because of their findings in several areas, including service volume and penetration (FEMA registrations relative to encounters), service capacity that peaked at 100,000 encounters per month, balance between individual and group encounters, representation of children and older adults in the data, and data on the need of survivors for crisis counseling services due to potential trauma and disaster-related losses.

Another CCP Evaluation: Relationship of Aspects of Services to Outcomes

In another study of CCPs related to the 2005 hurricane season (with Hurricanes Katrina, Rita, and Wilma), researchers also reviewed data from multiple CCPs, as well as archival and census data, in this case to understand how aspects of program services, including service intensity, service intimacy, and frequency of psychological referrals, related to participants' perceptions of having benefited from services.

Researchers defined service intensity as how long encounters lasted and how many of the encounters were second or later visits. They defined service intimacy as the percentage of encounters occurring in homes (Norris, Hamblen, & Rosen, 2009).

Forms for tracking data across CCPs include an individual crisis counseling services encounter log, participant surveys, and service provider feedback surveys. The researchers used data from 132,733 individual crisis counseling services encounter logs, 2,850 participant surveys, and 805 provider surveys. The participant survey, which gauges survivors' experiences of and satisfaction with CCP services, included items from an instrument called the Counseling Outcomes and Experiences Scale (COES), which, the researchers explain, "assess[ed] the extent to which the counselor (a) created an encounter characterized by respect, cultural sensitivity, and sense of privacy and (b) achieved realistic immediate outcomes (e.g., reducing stigma of help-seeking, normalization of reactions, increased coping skills) as perceived by the participant" (Norris, Hamblen, & Rosen, 2009).

Researchers found pronounced variability across counties in terms of the following:

- How long encounters lasted
- How many of the encounters were subsequent visits following an initial one
- Service locations
- Percentages of providers with advanced degrees
- Provider stress
- Participants' perceived benefits, as indicated by average COES scores

The average COES score across counties was 87, which the researchers note was good (Norris, Hamblen, & Rosen, 2009).

Researchers also found that participants rated their benefits from CCP services more positively in counties with greater service intensity and intimacy. Although the finding about service intimacy suggests that home visits may be better for individual crisis counseling than visits in other locations, the researchers point out that "it may not actually be the place that matters but rather how well the setting elicits privacy, empathy, sharing of reactions, and attention to the information that is being provided" (Norris, Hamblen, & Rosen, 2009).

People also rated their benefits from CCP services more positively in counties with higher frequency of psychological referrals. In their discussion of this finding, the researchers note that very few of the participants in services in the CCP data they examined were referred for more intensive intervention—on average, 3 percent—in spite of the fact that research on Hurricane Katrina had found that many survivors experienced posttraumatic stress disorder and depression. The researchers discuss these findings in relation both to the CCP and also to national policy:

> The reach and quality of the CCP must be judged according to what the program is designed to do, and it is not charged with delivering treatment. However, as leaders in disaster mental health, the national program can call attention to this gap in the federal response plan, and ensure that local providers are skilled at making referrals to mental health care when appropriate. This recommendation is not meant to imply that all or even the majority of crisis counseling participants should be referred for treatment, and in fact, the maximum frequency across these counties was

17 percent. Most people are resilient, but counselors can do a better job of identifying and meeting the psychological needs of participants who need more than crisis counseling to get by (Norris, Hamblen, & Rosen, 2009).

Additionally, researchers noted, participants' perceived benefits were lower when providers' stress levels were higher. They add that providers' levels of stress were significantly correlated with severity of losses in their county. To help manage provider stress levels, the CCP now requires a training that focuses on provider morale and stress management, suggests in its guidance a program management plan that addresses staff stress management, and offers related tip sheets and webcasts on stress management for responders (DHS, FEMA, & HHS, SAMHSA, CMHS, 2013; HHS, SAMHSA, DTAC, 2016c).

PsySTART

The CCP is a federal grant program that is implemented under specific statute and incorporates evidence-informed practices; other interventions, such as PsySTART, may be implemented in and after disasters even without CCP grant funding. Psychological Simple Triage and Rapid Treatment (PsySTART) is appropriate for individual and multiple communities affected by large-scale disasters. PsySTART is used by the American Red Cross, the Los Angeles County Emergency Medical Services Agency, more than 80 hospitals in the Los Angeles Hospital Disaster Resource Center System, and the State of Minnesota (University of California, Irvine [UCI], School of Medicine, Center for Disaster Medical Sciences [CDMS], 2016). It provides ways for individual responders to collect survivor mental health risk data, which is then aggregated and analyzed to help with identification of high-risk areas, which in turn can help organizations allocate limited resources where they are most needed. It enables a more effective response at the individual responder, organizational, and regional or even national levels.

At its main website, PsySTART is defined as "a strategy for rapid mental health triage and incident management during large-scale disasters and terrorism events" (UCI, School of Medicine, CDMS, 2016). PsySTART consists of three components: "community resilience via linkage between community 'disaster systems of care,' an evidence-based rapid triage 'tag' designed for field use by responders without mental health experience, and an information technology platform to manage the collection and analysis of triage needs in near real time" (UCI, School of Medicine, CDMS, 2016).

The evidence-based rapid triage tag is used by responders to record traumatic exposures, losses, health factors, and mental health care or disaster experience that an individual had prior to the most recent disaster. It helps responders in providing Psychological First Aid and referring individuals who need more comprehensive assessment or mental health intervention to these services (Schreiber, Yin, Omaish, & Broderick, 2014). As explained in a monograph about the strategy, "Rapid mental health triage is critical because, just as in emergency medicine where there is the 'golden hour' to get care, in disaster mental health, there is increasing evidence of a 'golden month' for the high-risk subset to be matched to brief, evidence-based case (Foa, Hearst-Ikeda, & Perry, 1995; Sijbrandij et al., 2007; as cited in Schreiber, 2010). Evidence on which the rapid triage tag risk factors are based includes some obtained through international responses to tsunami disasters. As noted in a paper on the use of PsySTART in the American Red Cross response in lower New York State after Hurricane Sandy:

> Two large disaster operations coordinated by the Centers for Disease Control and Prevention, the U.S. Public Health Service, and other federal and international offices used PsySTART to conduct psychological risk surveillance and to improve mental health recovery efforts in Thailand and American
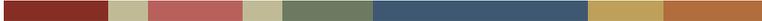
Samoa (Thienkrua et al., 2006; King et al., 2013; as cited in Schreiber et al., 2014). Longitudinal assessment of survivors confirmed the increased risk for posttraumatic stress disorder and depression in the months after the disaster among survivors testing positive for PsySTART factors (van den Berg, Wong, van der Velden, Boshuizen, & Grievink, 2012; Marshall, Schell, Elliott, Rayburn, & Jaycox, 2007; as cited in Schreiber et al., 2014).

PsySTART is a key component of the National Children's Disaster Mental Health (NCDMH) Concept of Operations (CONOPS) (UCI, School of Medicine, CDMS, 2016). In an article explaining PsySTART as part of the NCDMH CONOPS, Schreiber, Pfefferbaum, and Sayegh (2012) write that the approach involves use of the evidence-based rapid triage tag by responders in a range of key disaster systems of care organizations, including "hospitals, clinics, schools, decontamination sites, mass casualty collection points, and disaster relief settings, such as American Red Cross shelters." They go on to explain how these individual assessments are aggregated and used within the NCDMH CONOPS; the same methods can be used in response efforts with populations of all ages.

> This system allows for aggregation of individual-level triage data to generate an estimate of the population-level impact of a disaster or terrorism incident across sentinel sites. This system also permits aggregated triage-risk data to be shared across children's disaster systems of care in near real time, permitting shared situational awareness of triage levels and specific risk indicators. This information can then be used to determine levels, types, and locations of children's mental health needs. The incident action plan and planning and operations functions within a local, state, or national incident command system are then informed, in turn (Schreiber, Pfefferbaum, & Sayegh, 2012).

PsySTART IN PRACTICE: ITS USE BY THE AMERICAN RED CROSS AFTER HURRICANE SANDY

After Hurricane Sandy hit the eastern seaboard in fall 2012, the American Red Cross used PsySTART as part of its response. Researchers reviewed data from the use of PsySTART as part of the American Red Cross response in eight counties in lower New York State in the first 3 weeks of response (October 30 to November 23, 2012). They were evaluating feasibility of the use of PsySTART, as well as the utility of the approach. The data that researchers examined came from 18,823 disaster mental health contacts. Through the use of the rapid triage tag in these contacts, 17,979 risk factors were recorded (Schreiber, Yin, Omaish, & Broderick, 2014).

In this response, the rapid triage tag was used to collect data in ways that are somewhat similar to the ways in which CCP crisis counselors use the individual crisis counseling services encounter log. American Red Cross disaster mental health volunteers received training in PsySTART prior to beginning their work. Each day as they worked with survivors, they would carry a PsySTART recording sheet with them. After an encounter considered meaningful, generally 15 minutes or more, they would spend 1 minute or less checking off risk factors on the rapid triage tag, as well as indicating whether the individual was a child or an adult. Like CCP counselors, they did not ask questions to assess risk; instead, they entered the information they had learned in their conversation with the survivor. At the end of the worker's shift, he or she would report the data to a central operations center by phone or give the data to a supervisor. Data from individual workers were aggregated on a daily basis to the county level, as that level matched the primary operations management level for the emergency response (Schreiber, Yin, Omaish, & Broderick, 2014).

Risk ratios were calculated for counties by finding the total number of risk factors reported across all survivor contacts and dividing the total by the number of survivor contacts. For the full study period, the
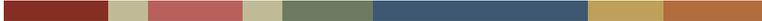
ratios ranged from 0.67 (Suffolk County) to 2.00 (Bronx County). The researchers found significant differences in some of the risk factors between these two counties. Importantly, across counties, they also found that the risk ratios sometimes indicated greater mental health risk in areas that were less physically affected by the disaster (i.e., farther from the storm surge). As they explain,

> Another finding was the number of contacts and the level of observed risk in contacts in the Bronx and Westchester areas that are geographically away from the water surge. The survivors being served in those areas had been evacuated north away from the flood zones or had experienced severe home damage or deaths because of wind damage in areas above the city. Thus, although the contacts were relatively far from the areas with the most severe physical effect, PsySTART alerted the disaster operations leadership to locations of significant psychological injury and need (Schreiber, Yin, Omaish, & Broderick, 2014).

This highlights the potential of PsySTART to guide deployment of disaster behavioral health responders to areas of greatest psychological risk, as well as to help individual responders to interact with survivors in ways that better meet their needs (Schreiber, Yin, Omaish, & Broderick, 2014).

The researchers note that PsySTART is not intended as tool for providing behavioral health diagnoses for survivors or for providing a "yes or no answer" (independent of confirmation by other means) to the question of whether a specific survivor needs clinical mental health care. Also, because its triage tool does not identify survivors, except for children, as part of special populations—those who may have higher levels of risk and/or special considerations after disasters—it cannot be used to highlight populations at particular mental health risk after a disaster (Schreiber, Yin, Omaish, & Broderick, 2014). Instead, it is intended as a strategy that can help individual, paraprofessional mental health volunteers; disaster response organizations; coalitions of organizations; and local, state, territorial, and tribal governments provide a mental health response to disasters guided by rapid identification of risk, triage to appropriate care, and management of resources to best meet the needs of disaster-affected populations.

CONCLUSION

"Disasters are by their very nature devastating to communities, often having significant and long-lasting individual- and population-level effects on physical, mental, and social well-being," begins a report from the Institute of Medicine (2015). As such, it makes sense that a set of approaches focuses on building and enhancing community resilience in advance of a disaster, to mitigate the effects of disaster impact and help community members manage post-disaster distress, experience better post-disaster behavioral health, and enjoy enhanced community resilience over time. These approaches and their evaluation make up a relatively new area of disaster behavioral health; as evidence accumulates, the field as a whole will have a better sense of best practices in building community resilience and helping it flourish.

Other approaches like the CCP and PsySTART tap into and fortify dimensions of community resilience—e.g., networks between and among individual community members, community organizations, and sectors—in meeting the needs of disaster-affected communities. Although, as noted, these approaches do not include intensive services, they *do* help with meeting the needs of the majority of people in most disaster-affected communities, and they also help with identifying people to be referred for intensive interventions. They address the resource limitations that confront disaster-affected communities, in that their interventions are designed to be delivered by paraprofessionals and their data collection activities to support scaling of

services to the level of need in the community. They also are based on acknowledgment of the innate resilience of most individuals; while most people in a disaster-affected community will experience some distress, particularly in the first 2 to 4 weeks after the disaster, most will also return to their customary level of functioning and well-being over time—and relatively simple interventions at the community level can support them in the process of getting there.

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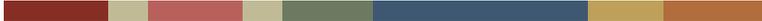
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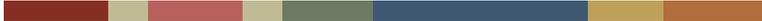
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