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Disaster Technical Assistance Center Supplemental Research Bulletin

Disaster Behavioral Health and Approaches to Community Response and Recovery

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CONTENTS

The focus of the *Supplemental Research Bulletin* is to provide an overview of the current literature on a specific topic and make it easy to understand for disaster behavioral health professionals who are not otherwise exposed to the research. The product aims to assist professionals and paraprofessionals involved in all-hazards planning, disaster behavioral health response and recovery, and/or Crisis Counseling Assistance and Training Program grant activities.

Would you like to see a *Supplemental Research Bulletin* on a topic we haven't yet covered? Contact us with topic ideas and feedback via email at dtac@samhsa.hhs.gov or phone at 1–800–308–3515.

INTRODUCTION

This issue of the *Supplemental Research Bulletin* focuses on general impacts of disasters on mental health and substance use (behavioral health) in affected communities. It highlights mental illnesses linked to disaster, as well as increases in substance use and other signs of stress individuals may experience as they work to regain their bearings after a disaster. It looks at the typical timeline of disaster behavioral health reactions at the community level, as well as factors that may place people at greater risk of adverse behavioral health outcomes in and after a disaster. It then explores the Crisis Counseling Assistance and Training Program (CCP), a federal grant program to support states, territories, and tribes in implementing effective behavioral health responses to disasters, as well as Psychological First Aid, an intervention framework and approach on which parts of the CCP are based.

This issue of the *Supplemental Research Bulletin* is based on literature and scientific publications found through the National Center for Biotechnology Information and U.S. National Library of Medicine (PubMed) database. All research cited in this issue was published in English, and most was conducted in the United States (except where studies conducted outside the United States proved useful to exploration of the topic).

BEHAVIORAL HEALTH IMPACTS OF DISASTER

In disaster-affected populations, research has found increased rates of acute stress disorder, posttraumatic stress disorder (PTSD), major depressive disorder, and anxiety, as well as physical health problems, difficulties in functioning, and other issues. It is important to note that most people who survive a disaster experience some impacts, and the majority of people do not develop new post-disaster mental illnesses or substance use disorders (North, Oliver, & Pandya, 2012; Goldmann & Galea, 2014; Czeisler et al., 2020; Kwong et al., 2021; Rettie & Daniels, 2021; Ustyol et al., 2023).[1]

Acute Stress Disorder

Acute stress disorder occurs within 3 days to 1 month of a traumatic event. It resembles PTSD in many ways—a diagnosis of either disorder requires exposure to a traumatic event, and the disorders share several symptoms—but while a PTSD diagnosis requires having symptoms within specific areas or "clusters" (e.g., intrusion symptoms, avoidance symptoms), as well as presence of symptoms for more than 1 month, a diagnosis of acute stress disorder requires nine or more symptoms in total, across multiple areas (National Center for PTSD, n.d.; American Psychiatric Association, 2013). According to the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, prevalence of acute stress disorder is usually less than 20 percent if the trauma is not interpersonal, but in the case of an interpersonal trauma such as assault or witnessing a mass shooting, rates may be higher (20 percent

1 This statement relates to whole disaster-affected populations. In some cases, subsets of the population based on gender, occupation, or other variables may experience higher rates of mental illness, as was seen among youth during the early part of the COVID-19 pandemic (Czeisler et al., 2020). A review study also found prevalence of anxiety among children and youth exposed to disaster to rise to a mean of nearly 50 percent 24 months after the disaster (Newnham et al., 2022).

to 50 percent) (American Psychiatric Association, 2013). In a systematic review and meta-analysis of research on populations after various types of trauma, investigators found a rate of acute stress disorder of 21.9 percent among survivors of disaster-related trauma (Geoffrion et al., 2022).

Posttraumatic Stress Disorder

A study of survivors of the Oklahoma City bombing (1995) who had been directly exposed to the incident and who were assessed 6 months after the disaster found that 34.3 percent of survivors had PTSD (North et al., 1999). In a study of directly exposed survivors of 10 disasters of various types (natural disasters, technological disasters, incidents of mass violence, and a terrorist attack) 1 to 6 months after the disaster, researchers found that 20 percent of survivors had disaster-related PTSD (North, Oliver, & Pandya, 2012). In a follow-up article reviewing research done with the survivors of the same 10 disasters, North (2016) notes that the upper limit of prevalence of disaster-related PTSD among highly exposed disaster survivors has typically been about one-third. Through a systematic review and meta-analysis of research on natural disasters, Beaglehole et al. (2018) found significant increases in rates of PTSD after disaster; however, this effect was limited to a small number of studies reporting continuous data and comparing populations with and without exposure to a disaster. In a study of 316 survivors of Hurricane Harvey (2017), Fitzpatrick (2021) found that, 2 months after the hurricane, more than one-quarter of survivors reported posttraumatic stress symptoms at levels high enough to meet clinical criteria for a diagnosis of PTSD.

Some reviews of research have observed variation in rates of post-disaster PTSD among disaster survivors (e.g., from none to as much as 70.51 percent, Lowe et al., 2019). Researchers note that this variation may result from differences in timing of assessment, screening and assessment tools and processes used, geographic location of studies, populations assessed, disaster types, and other factors (Goldmann & Galea, 2014; Lowe et al., 2019).

While many studies have focused on populations within 1 year of a disaster, others have looked at survivors over longer periods of time. In a study of survivors with direct exposure to the Oklahoma City bombing, North et al. (2011) found that 7 years after the bombing, 37 percent of people with PTSD linked to the bombing, as assessed approximately 6 months after the incident, no longer had PTSD. (The percentage of survivors with bombing-related PTSD within the first 6 months of the incident was 41 percent.) Just over one-quarter of the full sample of survivors (26 percent) had bombing-related PTSD 7 years after the incident. These high percentages may be related in part to the fact that the sample of survivors was limited to those with direct exposure to the bombing, the bombing itself was a deliberate and violent act, or other aspects of the disaster and its aftermath.

Depression

Research has also found elevated rates of depression among disaster survivors. In the study of directly exposed survivors of 10 disasters, North, Oliver, and Pandya (2012) found that 14 percent of survivors developed major depression in the 6 months after a disaster. In the review of disaster behavioral health research, North (2016) cites prevalence of major depressive disorder among directly exposed disaster survivors at 14 percent to 23 percent. Data associated with the COVID-19 pandemic seems to have increased these proportions. A recent study reviewing disaster behavioral health research found that

an average of 28 percent of survivors of disasters will develop depressive symptoms (Newnham et al., 2022). In a study of adults during the pandemic, Vahratian et al. (2021) reported a significant increase in people experiencing symptoms of depressive disorder, from 24.5 percent to 30.2 percent, from August through December 2020. Another group researching the impacts of the COVID-19 pandemic used a systematic review and meta-analysis to estimate change in worldwide prevalence of major depressive disorder owing to the COVID-19 pandemic in 2020 and found a global increase in major depressive disorder of 27.6 percent (COVID-19 Mental Disorders Collaborators, 2021).

Anxiety Disorders

In a review of disaster behavioral health research, Goldmann and Galea (2014) relate that panic disorder has been reported among disaster survivors, as have increases in prevalence of generalized anxiety disorder. In their review of data from survivors of 10 different disasters with direct exposure to the disasters, North, Oliver, and Pandya noted a 1 percent increase in prevalence of panic disorder from before to after the disasters, with post-disaster incidence of 1 percent (2012). They found similarly low levels of generalized anxiety disorder, which did not increase at all in prevalence from before to after the disasters, and which also had a post-disaster prevalence of 1 percent.

Alcohol and Substance Use Disorders

Some research seems to indicate that people rarely develop new alcohol use disorder (AUD) or substance use disorder (SUD) after a disaster. Instead, research has found the prevalence in disaster-affected populations is roughly equal to prevalence in the same populations before the disaster. For example, in the article about survivors of 10 disasters, the authors write, “Virtually no incident (new) postdisaster cases of substance use disorders were identified, as previously described for disaster-related alcohol use disorders” (North, Oliver, & Pandya, 2012, p. e44). In their review, Goldmann and Galea (2014) observe that some research has found increases in use, but not use disorders, of alcohol and drugs after disaster, but they also observe that research has found SUDs do not increase substantially in prevalence after disasters and that people experiencing maladaptive substance use tend to be those with prior substance use issues and conditions or those with other mental illness that has developed in response to the disaster. In a landmark review of 20 years of disaster behavioral health research—which included investigations published in about 250 articles, chapters, and books and involved 160 samples of disaster-affected populations—Norris, Friedman, Watson, Byrne, et al. (2002) report that health problems and concerns were identified in 23 percent of the sample populations from studies included in their review; they include increased use and misuse of substances within this category. In Beaglehole et al.’s (2018) systematic review and meta-analysis of the effects of natural disasters, they found an insignificant change in alcohol misuse and dependence.

People With Any Mental Illness, AUD, and/or SUD

In their review of 20 years of disaster behavioral health research, Norris, Friedman, Watson, Byrne, et al. (2002) note that what they refer to as “specific psychological problems” were identified in 121 of the samples, or 77 percent. They explain that “this set includes continua of symptoms of posttraumatic stress, depression, and anxiety, and other psychiatric problems, as well as criterion-based conditions of posttraumatic stress disorder (PTSD), major depression disorder (MDD), generalized anxiety disorder

(GAD), and panic disorder (PD)" (p. 211). In the study of directly exposed survivors of 10 disasters, North, Oliver, and Pandya report that one-third of survivors experienced some sort of post-disaster disorder (2012). Percentages may be higher for particular incidents or disaster types; North et al. (1999) report a rate of 45 percent with a psychiatric disorder among directly exposed survivors of the Oklahoma City bombing.

Comorbidities

People with one behavioral health issue or condition following a disaster may have more than one such issue or condition. In a review of 1 year of research on environmental disasters—a category including natural disasters as well as technological disasters that affect the environment—Lowe et al. (2019) report that people with PTSD were more likely also to have depression following a disaster, and people with depression were more likely to have PTSD. In addition, people with both conditions were more likely to have anxiety, sleep problems, and physical health problems (Lowe et al., 2019). Goldmann and Galea (2014) write that "disaster-related PTSD is often accompanied by symptoms of other anxiety disorders, MDD [major depressive disorder], and substance use disorders" (p. 173).

Suicidality and Suicide

Although suicide is of concern after a disaster and as a public health issue at all times, research on U.S. populations affected by disasters apart from the COVID-19 pandemic typically has not found significant increases in suicide. For example, in research on highly exposed survivors of the 9/11 attacks on the World Trade Center (2001), Xue et al. (2022) found that 7 percent experienced post-disaster suicidal thoughts or behavior, but only 1 percent of people experienced suicidal thoughts or behavior for the first time after the disaster. They found a significant association of post-disaster psychiatric disorder (9/11-related PTSD and post-disaster major depressive disorder, panic disorder, generalized anxiety disorder, and AUD) and suicide risk, but no significant association of disaster trauma exposure and risk of suicide.

Early in the COVID-19 pandemic, several leaders in mental health and suicidology expressed concern that the pandemic could lead to an increase in suicide, as it did or could involve increases in several known risk factors, including social isolation, economic difficulties, and unemployment (Moutier, 2020; Sher, 2020; Asper et al., 2022). There were also early reports of an increase in serious consideration of suicide (Czeisler et al., 2020), although the U.S. suicide rate declined in 2019 and 2020 (Curtin, Garnett, & Ahmad, 2022). Research reviews and meta-analyses from the early to mid-pandemic period (including research published as late as 2021) have had complex findings, with reports of increases in rates of suicidal ideation and suicide attempts during the pandemic (Dubé et al., 2021; Farooq et al., 2021; Pathirathna et al., 2022), but suicide rates that either decreased or remained the same during the pandemic (Asper et al., 2022; Angus et al., 2023). In a recent systematic review and meta-analysis of research published through December 2022, Yan et al. (2023) observe a significant increase in suicidal ideation from before to during the pandemic, as well as increases in suicide attempts, but a fairly stable suicide rate. In the United States, according to the Centers for Disease Control and Prevention (CDC), suicide rates increased by 30 percent from 2000 to 2018, and so the decline in 2019 and 2020 should be considered in that context (CDC, n.d.). From 2020 to 2021, the rate of suicides in the United States increased by 4 percent (Curtin, Garnett, & Ahmad, 2022). In a report on 2021 results of its National

Survey on Drug Use and Health, the Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that, in the past year, 4.8 percent of adults had serious thoughts about trying to kill themselves, 1.4 percent made suicide plans, and 0.7 percent attempted suicide (SAMHSA, 2022). However, of these groups, proportions no greater than 16 percent attributed their suicidal thinking, planning, and attempts to the COVID-19 pandemic (15.8 percent of those who had serious thoughts about suicide, 13.7 percent of those who made suicide plans, and 1.7 percent of those who attempted suicide). Among adolescents ages 12 to 17 years, 12.7 percent had serious thoughts about trying to kill themselves, 5.9 percent made suicide plans, and 3.4 percent attempted suicide, and, as among adults, less than 16 percent of each group attributed their thinking, planning, and behavior to the pandemic (15.1 percent of those who had serious thoughts of suicide, 12.0 percent of those who made suicide plans, and 8.4 percent of those who attempted suicide) (SAMHSA, 2022).

Research has also found increases associated with the pandemic in suicidal thinking, behavior, and attempts among various subsets of the population. For example, Madigan et al. (2023) reviewed data on child and adolescent emergency department visits for suicidal ideation, suicide attempts, and self-harm during the pandemic and found evidence of increases in visits for suicide attempts and modest evidence for increases in visits for suicidal ideation—in contrast to reductions in pediatric emergency department and general healthcare visits during the pandemic.

The overall impacts of the pandemic on suicidal thinking, planning, and attempts will likely become clearer over time, given the lag time between phenomena and publication of research, as well as potentially delayed impacts in the area of behavioral health.

Other Disaster Impacts

Several review studies have found psychological distress or nonspecific distress to be a common behavioral health impact of disasters of all kinds (Beaglehole et al., 2018; Norris, Friedman, Watson, Byrne, et al., 2002; Goldmann & Galea, 2014). Norris, Friedman, Watson, Byrne, et al. describe nonspecific distress as “elevation of various stress-related psychological and psychosomatic symptoms rather than . . . a particular syndrome, such as anxiety or depression” (2002, p. 216) and note it was identified in 39 percent of the sample populations included in their review. Some research has found elevations specifically in posttraumatic stress symptoms in disaster-affected populations. In a review of research, North (2016) reports that some survivors of the Oklahoma City bombing who did not develop PTSD continued to experience posttraumatic stress symptoms 7 years after that disaster. A review study found that, across research included in the study, an average of 24 percent of disaster survivors developed clinically significant posttraumatic stress symptoms within the 6 months after the disaster (Newnham et al., 2022).

Forbes and McHugh (2021) call attention to growing evidence of the presence of anger in disaster survivors, including dysfunctional anger. The writers note that evidence has been found of anger in survivors of both natural and intentional, human-caused disasters. They also cite evidence of anger shortly after disaster as predictive of development of PTSD 1 year later (Jayasinghe et al., 2008, as cited in Forbes & McHugh, 2021).

Health problems were also identified across studies as a consequence of disaster exposure. Norris, Friedman, Watson, Byrne, et al. (2002) write that health problems and concerns were found in 23

percent of the samples included in their study. Goldmann and Galea (2014) note that some disaster research reports that survivors of disaster experience physical problems and symptoms including headache, fatigue, abdominal pain, shortness of breath, and sleep problems. They write that research has found varying levels of these concerns and symptoms, ranging from 3 percent to 78 percent in one review.

Norris, Friedman, Watson, Byrne, et al. (2002) highlight psychosocial resource loss as a potential concern, which they define as declines in perceived social support, social embeddedness, self-efficacy, optimism, and perceived control. They note that these issues appeared in 9 percent of the samples in their study.

Finally, two recent studies (Rijnink et al., 2022; Abadie et al., 2022) found that disasters can impact access to and use of harm reduction supplies and practices for people with SUD. (Adaptations for delivering harm reduction services during and after the disruption caused by a disaster can be found in the August 2022 *Supplemental Research Bulletin*.)

Resilience

As noted in earlier sections of this bulletin, subsets of people (typically less than 40 percent of disaster-exposed populations) develop new mental illness after disaster, and people with preexisting mental illness, AUD, or SUD may experience worsening of symptoms. In addition, people without diagnosable disorders may experience issues in mood, functioning, and quality of life.

With these considerations in mind, it is also important to acknowledge that research seems to show that a majority of survivors will not develop new mental illness, AUD, or SUD. In the review study by North, Oliver, and Pandya (2012), the researchers point out that while one-third of their sample of directly exposed disaster survivors met criteria for a post-disaster diagnosis (PTSD, major depression, panic disorder, generalized anxiety disorder, AUD, or SUD), two-thirds did not. Similarly, Goldmann and Galea (2014) note that most people who experience a disaster do not develop psychopathology.

However, absence of a diagnosable disorder is not absence of impact and response—for example, the psychological distress, health problems, and psychosocial resource loss described in the previous section. In discussing resilience among disaster survivors, Goldmann and Galea (2014) describe it as a complex, dynamic process:

> There is a growing consensus . . . that resilience does not indicate the complete absence of any psychological symptoms after traumatic event exposure; rather, it describes the ability to 'bounce back' . . . . Resilient individuals generally experience distress for a short period and quickly return to pre-disaster levels of functioning, distinguishing them from those who experience a longer period of dysfunction and a more gradual return to baseline functioning ("recovery"). (p. 171)

In her disaster behavioral health research review, North (2016) also points out that absence of disorder is not absence of impact and response:

> Even resilient people . . . are likely to experience strong emotional reactions to being in a disaster. These ubiquitous emotional reactions to disaster should not be confused with or assumed to represent a lack of resilience or psychopathology, because most people who report such psychological reactions do not develop psychiatric disorders (North et al., 1999; North, Abbacchi, & Cloninger, 2012). (p. 138).

Layne and colleagues (2021) build on the conservation of resources theory (Hobfoll et al., 1991, as cited in Layne et al., 2021) that suggests traumatic stress is due to loss of resources, further suggesting that resiliency is not an individual characteristic as much as it is that individual's access to physical or emotional resources that can support recovery (such as physical safety, social support, or collective efficacy). Approaches to support behavioral health before, during, and after a disaster should recognize that individuals go into a disaster situation with varying levels of access to resources, including the expectation that assistance is available or valuable to them.

Timelines of Behavioral Health Impacts

Across all types of behavioral health impacts, Norris, Friedman, Watson, Byrne, et al. report that "in general, the longitudinal data suggested that the first year is the time of peak symptoms or effects (Bromet, Parkinson, and Dunn 1990; Carr et al. 1997a; McFarlane 1989; Nader, Pynoos, Fairbanks, and Frederick 1990; Phifer and Norris 1989; Phifer, Kaniasty, and Norris 1988; Shaw et al. 1996; Steinglass and Gerrity 1990; Thompson et al. 1993; Ursano, Fullerton, Kao, and Bhartiya 1995)" (2002, p. 224). They also report that across samples, symptoms generally improved over time, though often not in a linear fashion (i.e., people were sometimes faring more poorly before feeling better, or people were sometimes faring better and then doing more poorly, even though their trajectory was overall toward improvement). Goldmann and Galea similarly highlight the first year after a disaster as the time when mental health issues and conditions are at their most severe, followed by improvement, though they add that in some studies symptoms have persisted for months or years (2014). In a systematic review, Newnham et al. found that across studies included in their research, disaster survivors experiencing posttraumatic stress symptoms had improvement in those symptoms over time, whereas symptoms of depression and anxiety held steady over months and years after the disaster event (2022). In a study involving 885 low-income women affected by Hurricane Katrina (2005), Lowe and colleagues (2020) found that most of the women in their study experienced moderate symptoms that decreased over time (69.3 percent), a smaller percentage (23.1 percent) experienced severe symptoms that also decreased, and a small minority experienced severe symptoms that remained consistent over time (7.6 percent).

RISK FACTORS FOR BEHAVIORAL HEALTH IMPACTS

Several factors seem to place survivors at greater risk of behavioral health impacts or more severe behavioral health impacts after disaster. Some of these factors correspond to what people in disaster behavioral health sometimes refer to as "special populations," including the following:

- Female gender (corresponding to the special population of girls, women, and others with female identities) (Lowe et al., 2019; Norris, Friedman, Watson, Byrne, et al., 2002; Goldmann and Galea, 2014)
- Middle age among adults (Norris, Friedman, Watson, Byrne, et al., 2002)
- Younger age (children or adolescents) (Goldmann and Galea, 2014)
- Lower socioeconomic status (people with lower incomes and fewer financial resources available to them in a disaster) (Norris, Friedman, Watson, Byrne, et al., 2002; Lowe et al., 2019; Goldmann and Galea, 2014)

- Historically marginalized race or ethnicity (Goldmann & Galea, 2014; Newnham et al., 2022)
- Preexisting mental illness, AUD, or SUD (people with preexisting behavioral health conditions) (Norris, Friedman, Watson, Byrne, et al., 2002; Goldmann and Galea, 2014; North, Oliver, & Pandya, 2012; Lowe et al., 2020)
- Differences in abilities or access or functional needs, relative to the majority of the population (Sherman et al., 2017)[2]

Several of these factors may involve having less access to power, and therefore less access to resources. They may also involve responsibility for others, including younger and older family members and loved ones (i.e., middle age among adults). As a result, people with these factors may be more likely to experience greater disaster exposure, or exposure to more disaster-related adversity, which in turn may place them at greater behavioral health risk.

Research has also found multiple aspects of experience—prior to, during, and after a disaster—that may place people at greater risk after a disaster. These factors include the following:

- Pre-disaster trauma or adversity (Goldmann & Galea, 2014)
- High degree or severity of exposure to the disaster (Goldmann & Galea, 2014), including, for emergency responders, encountering human remains (Beidel et al., 2023)
- Exposure to more disaster-related stressors and traumatic events (Lowe et al., 2019; Goldmann & Galea, 2014)
- Injury to yourself or to a family member, or death of a family member, in the disaster (Norris, Friedman, Watson, Byrne, et al., 2002)
- Threat to your life or panic during the disaster (Norris, Friedman, Watson, Byrne, et al., 2002)
- Property damage or financial loss (Norris, Friedman, Watson, Byrne, et al., 2002)
- Relocation (Norris, Friedman, Watson, Byrne, et al., 2002)
- Greater resource loss (with resources defined broadly to include objects, conditions such as marriage, personal characteristics such as self-esteem, and energies such as time and money) (Norris, Friedman, Watson, Byrne, et al., 2002)
- Having children (Goldmann & Galea, 2014)

Norris, Friedman, and Watson (2002), as well as North (2016), also note that surviving a disaster caused intentionally by one or more people (an incident of mass violence or a terrorist attack) may place people at greater risk than surviving other types of disasters.

While risk factors are fairly consistent across mental illnesses after disaster, for post-disaster SUD, male gender is a risk factor, as is a preexisting SUD (North, 2016; Goldmann & Galea, 2014).

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2 Some research finds that while people with disabilities and their families are more likely to experience more severe exposure to disaster and less support in disaster recovery, there have not been corresponding increased behavioral health impacts among people with disabilities or access and functional needs (Mann et al., 2021; Chakraborty, Grineski, & Collins, 2019).

PROTECTIVE FACTORS FOR BEHAVIORAL HEALTH IMPACTS

Researchers have also found factors that may be associated with greater resilience or lower likelihood of experiencing behavioral health impacts of a disaster. These factors include the following:

- Age, with older adults less likely to experience several disaster behavioral health impacts, including PTSD, depression, and substance use (Goldmann & Galea, 2014)
- Social support, with perceived social support in some cases more protective than actual social support (Goldmann & Galea, 2014; Norris, Friedman, Watson, Byrne, et al., 2002; Lowe et al., 2019)
- Social embeddedness, which Norris, Friedman, Watson, Byrne, et al. define as "the structural component of social support describing the size, activeness, and closeness of the network" (2002, p. 239)
- Gratitude (Lowe et al., 2019)
- Religiosity (Lowe et al., 2019)
- Belief in your ability to cope, which has been defined as including optimism, self-esteem, coping self-efficacy, and hope (Norris, Friedman, Watson, Byrne, et al., 2002)

APPROACHES TO SUPPORTING BEHAVIORAL HEALTH IN DISASTER-AFFECTED COMMUNITIES

Many approaches exist for supporting behavioral health in communities during and after disaster. These include specific interventions, the focus of a recent *Supplemental Research Bulletin*, as well as frameworks and programs. In this *Supplemental Research Bulletin*, we focus on the Federal Emergency Management Agency (FEMA) Crisis Counseling Assistance and Training Program (CCP), a federal grant program implemented by FEMA and administered and overseen by the SAMHSA Center for Mental Health Services (CMHS) (Uekawa et al., 2016). SAMHSA CMHS also provides training and technical assistance to CCP grantees (Uekawa et al., 2016). Because the SAMHSA Disaster Technical Assistance Center (DTAC), which produces the *Supplemental Research Bulletin*, is part of SAMHSA CMHS, we have access to anonymized, aggregated data across grant programs, and so we can provide more information about how the program works, whom it serves, and its outcomes. Because of the close relationship of services provided under CCP grants to Psychological First Aid (PFA), a widely adopted framework for supporting disaster-affected communities, we will also explore PFA in this section, including its history and background, evidence, and value as a way to equip whole communities to increase resilience following a disaster.

Psychological First Aid

The history of PFA has been traced as far back as a 1954 publication by the American Psychiatric Association, *Psychological First Aid in Community Disasters*, which proposed development of a mental health intervention disaster responders could use to help survivors cope effectively (Despeaux et al., 2019). PFA was elaborated further in a 2006 field operations guide by the National Child Traumatic

Stress Network (NCTSN) and the National Center for PTSD, part of the U.S. Department of Veterans Affairs (West et al., 2021). The NCTSN and National Center for PTSD articulated eight core actions of PFA:

- Contact and engagement
- Safety and comfort
- Stabilization
- Information gathering
- Practical assistance
- Connection with social supports
- Information on coping
- Linkage with collaborative services (West et al., 2021)

Another milestone in development of PFA was the 2007 publication of an article in which disaster behavioral health experts identified five elements or principles of intervention in the immediate and short-term aftermath of collective trauma: promoting a sense of safety, calming, self-efficacy and community efficacy, connectedness, and hope (Hobfoll et al., 2007, 2021; Ursano, 2021; West et al., 2021).

The 2007 article and its five elements laid the foundation for an adaptation of the framework by the Australian Psychological Society and Australian Red Cross, who have developed a version of PFA that encompasses the five principles and action steps of look, listen, and link (West et al., 2021). The World Health Organization, American Red Cross, and the International Federation of the Red Cross have also developed their own versions of PFA (West et al., 2021).

BENEFITS AND RISKS OF PSYCHOLOGICAL FIRST AID

An important benefit of PFA is that it can be taught easily to people who are likely to be interacting with disaster survivors, such as first responders and others who are not behavioral health professionals (West et al., 2021). As such, it broadens the population of people within a community who can be equipped to provide meaningful support to others experiencing impacts of a disaster. Because it is a principle-based, high-level program, it is amenable to adaptation for cultural appropriateness around the world.

PFA, when implemented well, can reduce distress symptoms and increase self-efficacy among survivors. If implemented poorly, PFA can undermine credibility (downplaying appropriate responses, making promises that cannot be kept), undermine survivors' self-efficacy, or miss opportunities to connect someone to mental health services when needed. A scoping review by Wang and colleagues (2021) found wide implementation but scant documentation of the content of PFA trainings, including length/duration of training (which could range from 90 minutes to 6 days). To avoid potential harms of poorly implemented PFA, Wang and colleagues recommend that any training include opportunities to rehearse and practice, post-training supervision, and increased clarity on role boundaries (particularly when to refer to mental health services).

EVIDENCE INFORMING AND IN SUPPORT OF PFA

In general, researchers have noted it has been difficult to build evidence for PFA—sometimes because of aspects of PFA that might be considered strengths. In a recent commentary in a journal issue looking back on the 2007 "five elements" article and considering its ongoing applications, West and colleagues observe that the flexibility of PFA makes it difficult to build evidence for it as an approach (2021). They go on to highlight some of the challenges of conducting research on post-disaster interventions and approaches to supporting individual and community healing:

> Incidence of trauma-related disorders can be measured, but data have been mixed on whether application of PFA prevents major depressive disorder and post-traumatic stress disorder following traumatic exposure. . . . While diagnosed illness following disaster may be more reliably measured, it is confounded by an array of pre- and post-disaster factors as well as the duration and intensity of trauma exposure by individual survivors. In this context, it has proven difficult to measure the impact of PFA interventions. (West et al., 2021, p. 374)

In a randomized controlled trial specifically of the Johns Hopkins RAPID model of PFA (rapport building via **r**eflective listening, **a**ssessment of needs, **p**rioritizing attending to mild versus severe reactions, **i**ntervention, and **d**isposition), with the adverse event in the experiment being viewing a distressing video, researchers found that after the intervention, participants in the RAPID-PFA group had significantly lower state anxiety scores, both immediately after the intervention and 30 minutes later. RAPID-PFA also significantly increased positive affect scores 30 minutes after the intervention (Despeaux et al., 2019).

In a systematic review of research on PFA from 1990 to 2010, researchers concluded that PFA as delivered by non-mental health professionals could be considered evidence-informed, though lacking in adequate scientific evidence to support its implementation as, or as part of, a treatment standard or guideline (Fox et al., 2012). In a review of research on the impact of PFA on mental health and well-being, researchers found that while findings from the studies included in their review indicated positive impacts of PFA, including reductions in symptoms of anxiety, depression, posttraumatic stress, and distress, problems with the body of research (e.g., inconsistent intervention components, inadequate evaluation methodologies) made it difficult to determine overall efficacy of PFA (Hermosilla et al., 2022).

One of the challenges, as observed by Figueroa and colleagues (2022), may be the short-term benefits of PFA for distress but not necessarily inoculative benefits against PTSD or later depression symptoms. A study of severely distressed emergency room patients in Chile found that a form of PFA (PFA-ABCDE or active listening, breathing retraining, categorization of needs, referral to ancillary services, and psycho-education) reduced immediate distress and short-term PTSD symptoms when compared to general psycho-education alone (step "E" of ABCDE). Participants who received PFA-ABCDE reported greater distress relief. Fewer PTSD symptoms were reported 1 month after the intervention in the PFA-ABCDE group, but the intervention did not have an effect on depressive symptoms at 1-month follow-up or in PTSD symptoms at 6 months. However, if the large majority of disaster-affected individuals experience symptoms following a disaster and improve with time (as in Lowe et al., 2020), then this short-term distress relief has a benefit for a large number of disaster survivors (even if a small percentage will experience ongoing symptoms).

Crisis Counseling Assistance and Training Program

As noted earlier in this bulletin, the CCP is a federal grant program implemented by FEMA and administered and overseen by SAMHSA CMHS (Uekawa et al., 2016). Perhaps the most central and integral of its services is crisis counseling, which is based on PFA as articulated in Hobfoll et al.'s 2007 article—i.e., it is aimed at promoting in disaster survivors a sense of safety, calming, self-efficacy and community efficacy, connectedness, and hope (Hobfoll et al., 2007; Bellamy et al., 2019).

Authorized by the 1974 Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended by Public Law 100-707), the FEMA CCP provides grantees—states, territories, and federally recognized tribal governments—with supplemental funding and assistance to meet their residents' behavioral health needs associated with natural disasters, technological disasters, incidents of mass violence, and terrorist attacks (Uekawa et al., 2016; Bellamy et al., 2019). The CCP comprises two grant programs: the Immediate Services Program (ISP), which runs for 60 days, and the Regular Services Program (RSP), which is designed to support recovery after conclusion of the ISP over 9 months, up to the 1-year anniversary of the disaster (Bellamy et al., 2019). Through an ISP or RSP grant, a state, territory, or tribe can hire crisis counseling staff directly, or they can subcontract with local provider organizations, who in turn hire crisis counseling staff and deliver services in communities (Norris, Hamblen, & Rosen, 2009).

CCP SERVICES

In federal regulation, crisis counseling is defined as "the application of individual and group treatment procedures which are designed to ameliorate the mental and emotional crises and their subsequent psychological and behavioral conditions resulting from a major disaster or its aftermath" (Crisis Counseling Assistance and Training, 1989, p. 369). Through the CCP, grantees provide a range of services, including individual and family crisis counseling; brief educational and supportive contact; group crisis counseling; public education; assessment, referral, and resource linkage; and community networking and support (FEMA & SAMHSA, 2021). Within the CCP model, crisis counseling services are provided by people who are often from the communities they serve and who may therefore have earned the trust of members of the community prior to the disaster (FEMA & SAMHSA, 2021). As with PFA, within the CCP services can be provided by people who have been trained in service provision but who are not licensed mental health professionals (NCTSN & National Center for PTSD, 2006; FEMA & SAMHSA, 2021). However, CCP training and guidance documents encourage programs to have licensed mental health and SUD treatment professionals to whom they can refer disaster survivors in need of clinical treatment, including immediate or emergency treatment (FEMA & SAMHSA, 2021; SAMHSA & FEMA, 2022). Grantees also provide secondary services including development and distribution of psycho-educational materials, as well as media and public service announcements (FEMA & SAMHSA, 2021).

As noted, one of the most central and commonly provided services under the CCP is crisis counseling—and specifically, individual and family crisis counseling, in which counselors meet with disaster survivors, discuss reactions to the disaster, make survivors aware of the reactions that are common after disasters, and offer tips and resources for coping. Crisis counseling often involves assessment and referral, which counselors are trained and encouraged to perform after multiple visits

to a single survivor or anytime they sense that a survivor may be having trouble coping with reactions to the disaster (SAMHSA DTAC, 2022).

FLEXIBILITY OF THE CCP TO FOCUS ON DISASTER-SPECIFIC SPECIAL POPULATIONS

An important element of the CCP model is its focus on special populations. As discussed earlier in this bulletin, specific populations may be at heightened risk of poor behavioral health outcomes after a disaster due to shared risk factors such as gender, socioeconomic status, and preexisting mental illness. In addition, some disasters have distinctive special populations—e.g., frontline healthcare workers during the COVID-19 pandemic (Bender et al., 2020; Hennein & Lowe, 2020). As explained in a U.S. Government Accountability Office (GAO) report,

> Its [the CCP's] funding recipients conduct a needs assessment that identifies the most vulnerable populations that would benefit from receiving crisis counseling services. FEMA notes that in most disaster situations, children, adolescents, older adults, underserved populations, individuals with disabilities, and individuals with access or functional needs may benefit from program services, but the needs assessment may reveal additional groups who are vulnerable to disaster effects or who have been particularly affected by the disaster. (GAO, 2021, p. 41)

EVIDENCE INFORMING AND IN SUPPORT OF THE CCP SERVICE MODEL

The CCP service model is designed to meet a spectrum of common behavioral health needs following a disaster:

- Crisis counseling to support many people in coping with stressors and reactions
- Assessment and referral to help people who need clinical behavioral health services to access those services
- Group services and community linkages to foster resilience through connections, networking, and support
- Broader educational efforts through social and mainstream media to make people aware of common disaster reactions and availability of behavioral health support

As such, the program's services are responsive to the preponderance of evidence regarding how communities typically experience and react to disaster.

In the summary of their landmark research review, Norris, Friedman, and Watson conclude that "altogether, the research demands we think ecologically and design and test societal- and community-level interventions for the population at large and conserve scarce clinical resources for those most in need" (2002, p. 240). As noted earlier in this bulletin, this is essentially the CCP's approach: many of the workers under each grant program are community members as opposed to clinical behavioral health professionals, but the CCP's frontline workers are trained to assess survivors and refer them to clinical resources if needed (FEMA & SAMHSA, 2021).

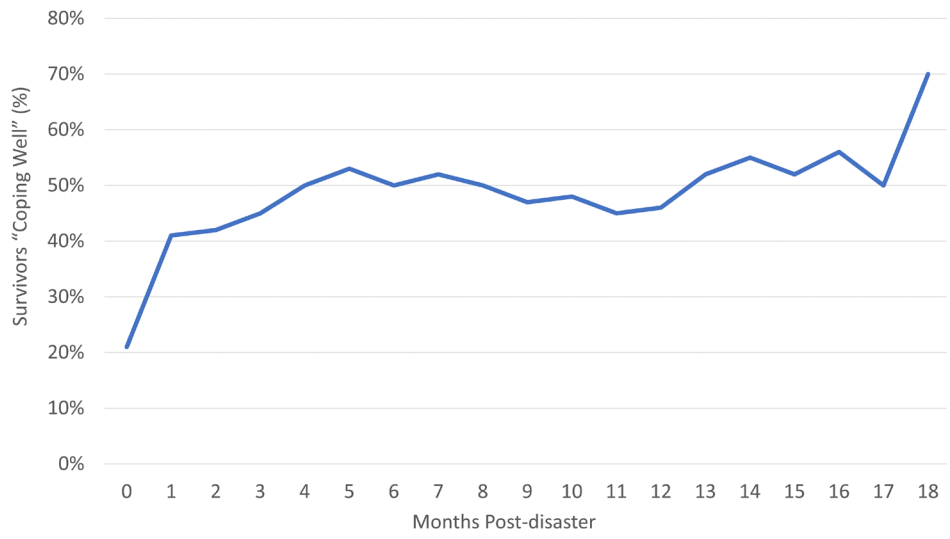
North cites research indicating "support, education, and reassurance"—cornerstones of services provided by CCP crisis counselors—for "subdiagnostic distress"—i.e., the type and level of distress that

the majority of disaster survivors will experience (2016, p. 139). Goldmann and Galea (2014) discuss the importance both of helping disaster survivors meet their social needs and also of referring people with urgent psychiatric needs to services—and both activities are foci of the CCP.

EVIDENCE IN SUPPORT OF THE CCP

In addition to evidence informing CCP services, some evidence seems to indicate that the programs themselves are beneficial, and that aspects of the program help states, territories, and federally recognized tribal organizations to support their communities in disaster response and recovery. For example, evidence from CCP data aggregated and analyzed by SAMHSA DTAC suggests that programs may help people cope effectively with post-disaster challenges. CCP crisis counselors and outreach workers collect data on individual and family crisis counseling encounters, indicating event reactions survivors are experiencing or absence of event reactions, indicated on the data collection forms as "coping well." As shown in Exhibit 1, in an analysis of data from 2018 and 2019 natural disaster-related CCP grants, increasing proportions of people receiving CCP individual and family crisis counseling services have been identified as "coping well" over time.

Exhibit 1. Percentage of Survivors "Coping Well" After 2018 and 2019 Natural Disaster CCP Grants



Note: The analysis was limited to natural disasters because their impacts are discrete, unlike a public health emergency such as the COVID-19 pandemic or technological disasters, where impacts may occur over longer periods of time.

There is evidence suggesting the reach of CCP services is in good proportion to level of community need. In an article reviewing service use in Project Liberty, a CCP established in New York State to support response to disaster behavioral health needs linked to the September 11, 2001, terrorist attacks, the researchers note that overall service use matched prior estimates of service need, and individuals served reflected the demographics of the targeted service areas (Donahue et al., 2006). In a review of 19 CCPs across multiple states over 16 months to help support survivors and evacuees after Hurricane

Katrina, Norris and Bellamy (2009) found evidence of reach in the general alignment of numbers of FEMA registrations for assistance and numbers of CCP encounters.

Donahue et al. (2006) also note that in some areas, the proportions of African Americans and Hispanics accessing Project Liberty services exceeded what would be expected based on census data and estimates of lifetime diagnoses of PTSD, mood disorders, and anxiety disorders. In addition, gender did not seem to affect how survivors accessed services. The researchers conclude that "these findings must be interpreted cautiously, but they appear to suggest that provision of free crisis counseling services in community settings may have reduced stigma and improved access, particularly for individuals from racial and ethnic minority groups and for men" (Donahue et al., 2006, pp. 1265–1266).

The CCP reaches individuals within populations that may be at heightened risk of post-disaster behavioral health impacts. For example, analysis of CCP data from COVID-19 grants indicates that more than half of individual or family crisis counseling encounters included women (59 percent), two-thirds included people from historically marginalized racial or ethnic groups (67 percent), and nearly 1 in 4 (18 percent) included people with a mental health and/or substance use need (Exhibit 2).

Some states had successful outreach to vulnerable populations, particularly from historically marginalized racial and ethnic groups. For example, more than half (55 percent) of the individual or family crisis counseling encounters in Rhode Island were with Hispanic individuals, nearly half of the encounters in Utah (44 percent) were with American Indians/Alaska Natives, and almost one-third of the encounters in South Dakota (31 percent) were with individuals with a physical limitation (other state-specific rates are provided in Appendix A).

Exhibit 2. Percentage of CCP COVID-19 Grant Individual/Family Crisis Counseling Encounters by Select Characteristics

Characteristic	Percentage of CCP COVID-19 Grant Individual/ Family Crisis Counseling Encounters Including Individuals With the Following Characteristics
Female	63.1%
Children (0–17 years)	7.6%
Adult (18–64 years)	83.7%
American Indian/Alaska Native	1.6%
Asian	6.7%
Black or African American	32.2%
Native Hawaiian or Other Pacific Islander	0.8%
Hispanic	32.6%
Had Physical Need	11.4%
Had Cognitive Need	3.4%
Had Mental Health or Substance Use Need	17.9%

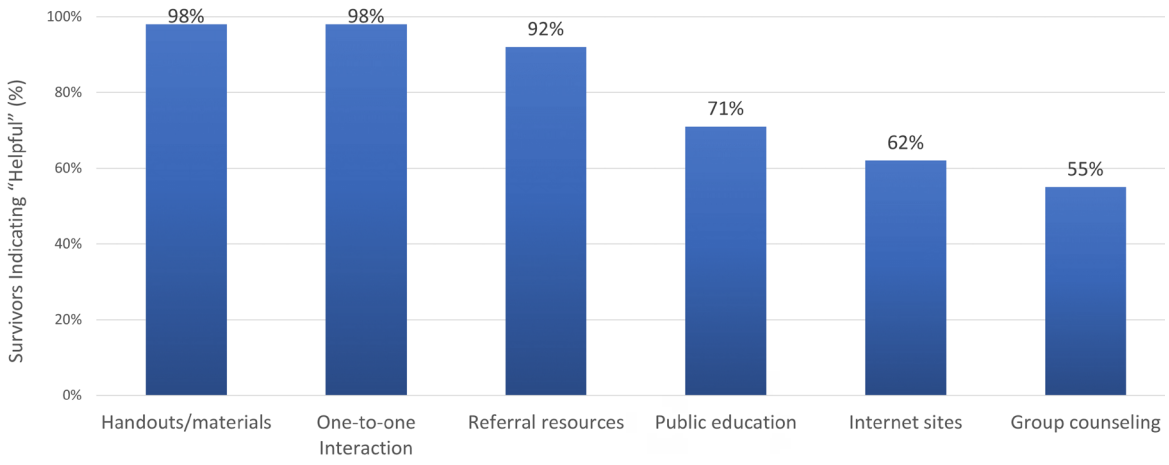
Evidence also shows that the structure of the CCP and the services and activities it supports are effective in helping disaster survivors and attaining program goals. For example, in an article reflecting on Project Liberty, the authors note that the ability to engage specific provider organizations—in the case of their program, local nongovernmental organizations—was helpful, as it allowed the program to reach

populations it might not have reached otherwise (Sederer et al., 2011). In the same article, the authors report that media and public education activities were effective in helping lower stigma about seeking behavioral health support and in enhancing awareness of common disaster reactions and program services available; by the 1-year anniversary of the disaster, they note, half of New Yorkers surveyed reported knowing about Project Liberty, and one-third had called or were considering calling the project's toll-free mental health hotline publicized through the CCP (Sederer et al., 2011).

Some research has zeroed in on CCP services, and even on specific aspects of these services. For example, in a cross-site study of several CCPs established after the 2005 hurricane season, which included Hurricane Katrina, researchers found that aggregate ratings of participants' perceived benefits from program services improved with increases in service intensity (longer visits or more repeat visits), service intimacy (services provided in homes versus in public places), and frequency of psychological referrals, and with decreases in provider job stress (Norris, Hamblen, & Rosen, 2009).

As part of the CCP, survivors who receive CCP services are asked to complete a feedback survey. When asked about specific CCP services, the majority of disaster survivors have indicated that they found the services helpful, though they have identified some services more frequently as helpful than others. More than half of respondents reported finding all types of core CCP services identified in the survey helpful. Survey respondents were most likely to report handouts, materials, and one-to-one interactions as helpful (98 percent of respondents). Exhibit 3 presents the reported helpfulness for each type of service.

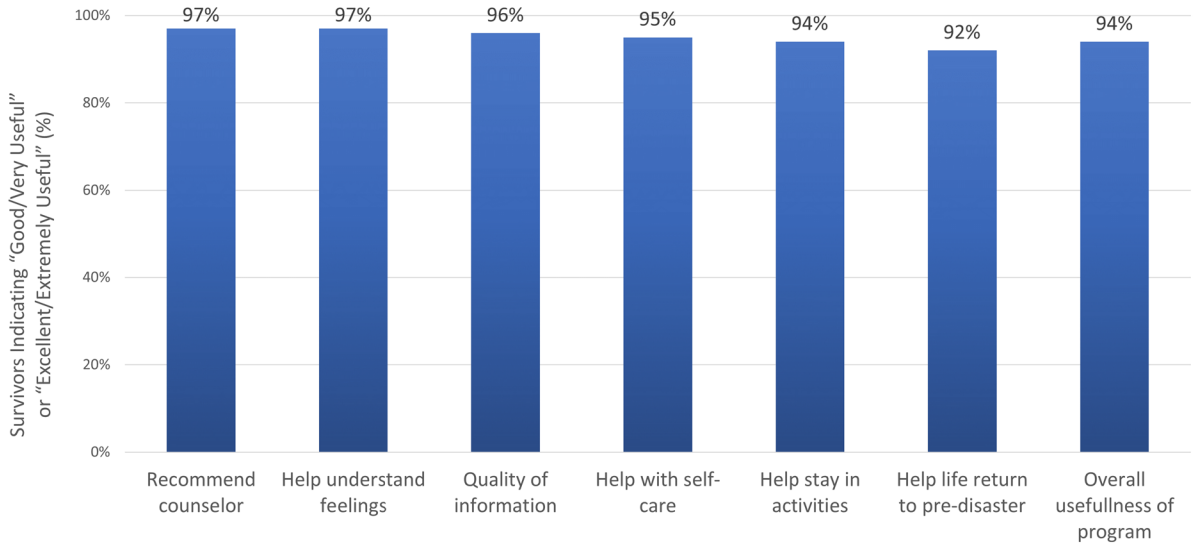
Exhibit 3. Percentage of Survivors Who Indicated Various CCP Materials Were Helpful



In the study of CCPs established after the 2005 hurricane season, researchers also found that participants in services were generally quite satisfied (with an average score of 87 on a 100-point scale) (Norris, Hamblen, & Rosen, 2009).

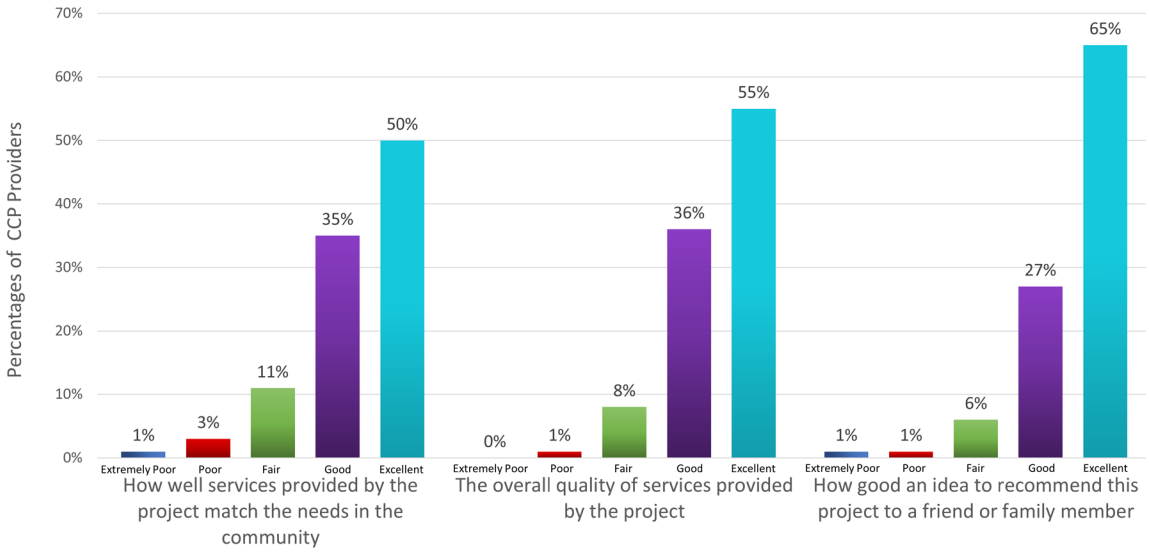
In the survey of CCP recipients of program services, respondents generally have positive feedback. Ninety-four percent of respondents have reported that the CCP was "very useful" or "extremely useful." When asked about specific program goals, more than 90 percent of respondents indicated that the CCP did a "good" or "excellent" job in various aspects of the program, including helping understand feelings and helping with self-care (see Exhibit 4).

Exhibit 4. Percentages of Survivors Who Indicated That Various Aspects of the CCP Did a "Good" or "Excellent" Job or That Overall the CCP Is "Very Useful" or "Extremely Useful"



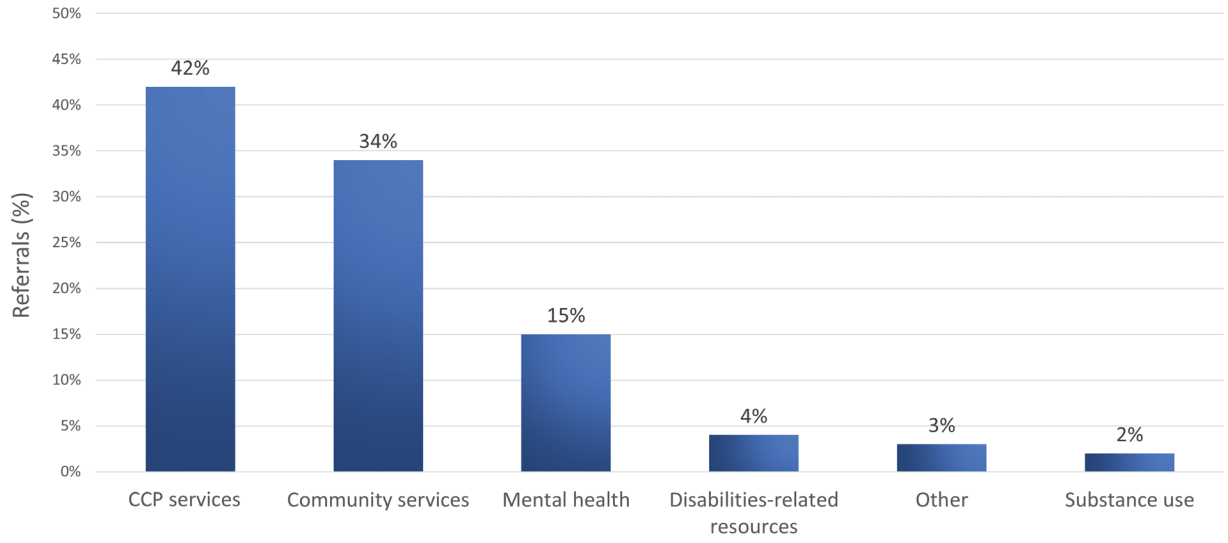
CCPs also collect data on satisfaction of service provider staff members with their experience of the program. In a study of survey responses from CCP employees from November 2012 through March 2016, researchers found that a majority of respondents reported fairly low levels of job stress, and, for a majority of job satisfaction-related questions, high mean levels of job satisfaction (Bellamy et al., 2019). In data analyzed across CCP grants, SAMHSA DTAC staff have found that, of service providers completing the Service Provider Feedback Form, another data collection tool used by CCPs, 85 percent indicated that the services provided were "good" or "excellent" matches to the needs of the community, 92 percent indicated that there was a "good" or "excellent" likelihood of their referring someone with a need to the CCP, and 91 percent reported "good" or "excellent" quality of services provided by the CCP (see Exhibit 5).

Exhibit 5: CCP Providers' Rankings of Services and the Program Overall



A goal of the CCP is to provide needed referrals to survivors, and counselors receive training on how and when to refer a survivor throughout the grant period. Sixty-six percent of respondents to the survey of recipients of program services reported they used at least one referral. Across all referrals used, CCP service referrals (42 percent of referrals used), community service referrals (34 percent), and mental health service referrals (15 percent) were the most common types used. Disability-related resources (4 percent), other referrals (3 percent), and substance use referrals (2 percent) were not commonly used (see Exhibit 6).

Exhibit 6: Percentages of CCP Referrals Used by Type



EVIDENCE SUGGESTING CHANGES TO THE CCP MAY BE ADVISABLE

In their summation of 20 years of disaster behavioral health research, Norris, Friedman, and Watson (2002) write that "disasters that engender severe, lasting, and pervasive psychological effects are rare, but they do happen" (p. 246) and specify that, according to their review of sample populations from various research studies,

> it appeared that sample- (and presumably population) level effects were greatest when at least two of the following event-level factors were present: (1) The disaster caused extreme and widespread damage to property, (2) the disaster engendered serious and ongoing financial problems for the community, (3) the disaster was caused by human intent, and (4) the impact was associated with a high prevalence of trauma in the form of injuries, threat to life, and loss of life. (p. 246)

They go on to write that even in disasters where at least two of these factors are present, they do not expect a majority of survivors to experience clinically significant behavioral health problems, but that in these disasters, additional professional clinical behavioral health support may be needed (Norris, Friedman, & Watson, 2002). Arguably the World Trade Center terrorist attacks of September 11, 2001, involved two or more of the four factors specified by Norris and colleagues, so it is perhaps not surprising that Sederer et al. (2011) identified exclusion of coverage for treatments, limited duration of clinical programs, and follow-up on long-term conditions as issues for their CCP. They attribute these issues to program design based on the inaccurate view that "individuals needing additional services would be served by the public (or perhaps private) systems of mental health care" (p. 1088). While acknowledging the insufficiency of systems to meet the mental health needs of segments of the disaster-affected population, Sederer et al. note the importance of assessment and referral to community-based mental health services, even if these services are overburdened. In another article on the same disaster and the CCP, Donahue et al. (2006) observe that "spikes in help seeking occurred five to eight months after the attacks, and service use remained high for nearly two years afterward ... These findings point to the need for long-term service availability" (p. 1265).

Norris, Hamblen, and Rosen (2009) also discuss the issue of CCP grant length, observing that

> 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. (p. 183)

Recommendations aimed at ensuring CCP crisis counselors are equipped to refer survivors appear both in the research literature (Bellamy et al., 2019) and also in CCP guidance (FEMA & SAMHSA, 2021; SAMHSA DTAC, 2023).

Over time, flexibilities in the CCP model related to timing have allowed for longer grant periods. For example, of the 51 RSP CCP grants established to support communities in coping during the COVID-19 pandemic, 44 (86 percent) had an extension of the typical RSP period. These lasted anywhere from 60 days to 18 months. This aspect of flexibility of the CCP was historically valuable during the COVID-19 pandemic, with its protracted period of impact and spikes in collective adversity and fear.

CCP grants in response to the COVID-19 pandemic differed in many ways from "typical" disaster response programs, but they both highlight the flexibility of the CCP model and hold potential lessons learned for what long-term CCPs may look like. As noted above, these programs began in 2020 and continued through several extensions, many running through the end of 2022. With the pandemic and its impacts lasting longer than other disasters, many grantees described pivoting as community needs changed and public health restrictions ebbed or returned. In the face of restrictions that limited in-person services due to infection risk, grantees leaned into tools that could deliver remote, 24/7 services such as helplines and text lines. Websites and social media accounts were also more widely used as a way to disseminate educational information to survivors and promote synchronous services. Other tools, such as cloud storage automated text translators and free videoconferencing, also helped grantees quickly disseminate information in ways that were fast to implement and accessible from anywhere. In addition, these kinds of tools and ways of working offer potential solutions to the challenges of a CCP—finding those in need, quickly and easily disseminating resources and referrals, and keeping track of program activities to ensure the most vulnerable are being included in program services.

CONCLUSION

Disasters impose stressors on individuals and communities. Many survivors show signs of stress and distress that last for relatively short periods and often resolve on their own. Some develop short- and long-term mental health problems linked to the disaster and post-disaster adversity; conditions linked to disaster, typically in a subset of the impacted population, include acute stress disorder, PTSD, depression, anxiety, and increased alcohol and substance use. Survivors seem not to develop new alcohol or substance use disorders after disasters very frequently. While in the past research has not found increases in suicide after disaster, and while there seem not to have been increases in suicides in association with the COVID-19 pandemic, research published in the next few years may provide a clearer picture of how the pandemic impacted collective risk of suicide. Disaster survivors may experience psychological distress, problematic anger, health problems, and loss of resources including optimism, self-efficacy, social support, and perceived control. Resilience is more common after disaster than ongoing distress or psychopathology. People show most distress and behavioral health problems in the first year after a disaster, though symptoms and issues can persist for years. Risk factors for poorer behavioral health outcomes after disaster include female gender, middle age, youth, lower socioeconomic status, and being of a historically marginalized race or ethnicity, as well as pre-disaster trauma and adversity, greater disaster exposure, and greater resource loss in and after the disaster. Protective factors include older age, social support and connectedness, self-efficacy, and hope.

While many approaches are available for supporting community behavioral health after a disaster, in this bulletin we focus on the FEMA CCP, which provides a range of services to help disaster survivors cope with stressors, understand their disaster reactions, and access their natural resilience. A core service of the CCP is crisis counseling, which is based on PFA, a widely adopted and adapted approach to supporting communities in the immediate and mid-term aftermath of disaster. Many forms of PFA have been developed and implemented, but one of the most influential was articulated in a 2007 paper, in which five elements or principles were highlighted: promoting a sense of safety, calming,

self-efficacy and community efficacy, connectedness, and hope (Hobfoll et al., 2007). PFA and crisis counseling in the CCP are beneficial in that they can be taught to and delivered by people without professional clinical behavioral health backgrounds, and in that they are amenable to adaptation for appropriateness for various local cultures and communities. In part because of its flexibility and diversity in forms, PFA is difficult to research, and it is largely understood as an evidence-informed approach. With roots in PFA and other practices and bodies of evidence, the CCP is a federal grant program to help states, territories, and federally recognized tribes to supplement their resources to meet the behavioral health needs of their residents after disaster. The CCP can be initiated immediately after a disaster declaration, and services can continue through the 1-year anniversary of the disaster, or longer, if needed. In particular in response to the COVID-19 pandemic, many CCP RSP grants were extended. CCP grantees can hire provider organizations that are well-positioned to reach specific communities and populations within their service area. CCPs provide a spectrum of services, including individual and family crisis counseling; brief educational and supportive contact; group crisis counseling; public education; assessment, referral, and resource linkage; and community networking and support; as well as development and distribution of educational materials and media and public service announcements (FEMA & SAMHSA, 2021). The CCP is in alignment with what researchers have predicted community disaster behavioral health needs are likely to be. Research has also elucidated benefits of the program, including customization options and ability to reach target populations, and high satisfaction levels among service providers and recipients. One area of potential improvement that has been highlighted by research is the need for coverage for clinical care, although some have pointed out that the CCP is designed to foster referral for clinical services and as such should not cover these services, but instead make sure that local provider organizations are trained at assessment and equipped at referring people to clinical care as needed.

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APPENDIX A. INDIVIDUAL/FAMILY CRISIS COUNSELING ENCOUNTERS DURING CCP COVID-19 GRANTS BY SELECT CHARACTERISTICS

State	% Female	% Child (0–17)	% American Indian/ Alaska Native	% Asian	% Black or African American	% Native Hawaiian/ Other Pacific Islander	% Hispanic	% Physical Need	% Cognitive Need	% Mental Health/ Substance Use Need
U.S.	63%	8%	2%	7%	32%	1%	33%	11%	3%	18%
AL	78%	8%	0%	1%	64%	0%	34%	8%	1%	10%
AR	73%	11%	0%	1%	40%	0%	55%	8%	2%	15%
AZ	79%	5%	3%	1%	15%	1%	53%	26%	7%	34%
CA	69%	10%	1%	26%	14%	3%	21%	16%	5%	17%
CO	73%	24%	12%	3%	8%	0%	39%	12%	6%	16%
CT	56%	3%	0%	1%	42%	0%	31%	15%	5%	21%
DC	73%	9%	0%	5%	74%	0%	12%	17%	13%	20%
DE	77%	1%	0%	0%	26%	0%	72%	5%	2%	71%
FL	82%	60%	2%	3%	34%	2%	40%	30%	12%	25%
GA	70%	5%	4%	1%	42%	0%	48%	19%	4%	25%
HI	61%	10%	1%	21%	3%	33%	36%	11%	9%	32%
IA	65%	7%	1%	1%	4%	0%	89%	19%	8%	47%
ID	74%	3%	5%	1%	0%	0%	86%	16%	4%	21%
IL	62%	16%	0%	3%	28%	1%	35%	7%	2%	44%
IN	63%	1%	0%	1%	23%	0%	74%	21%	3%	64%
KS	60%	4%	1%	2%	13%	1%	75%	22%	5%	58%
LA	65%	3%	0%	1%	64%	0%	33%	10%	3%	12%
MA	69%	5%	1%	6%	12%	1%	63%	11%	4%	32%
MD	85%	0%	0%	2%	26%	0%	71%	4%	0%	10%
ME	60%	9%	1%	1%	23%	0%	70%	13%	6%	33%
MI	60%	2%	1%	1%	19%	0%	76%	12%	3%	33%
MN	63%	8%	14%	2%	59%	0%	8%	3%	1%	78%
MO	65%	5%	2%	1%	20%	1%	73%	18%	5%	40%

State	% Female	% Child (0–17)	% American Indian/ Alaska Native	% Asian	% Black or African American	% Native Hawaiian/ Other Pacific Islander	% Hispanic	% Physical Need	% Cognitive Need	% Mental Health/ Substance Use Need
MT	70%	6%	23%	1%	0%	0%	72%	14%	2%	19%
NC	65%	5%	2%	2%	23%	0%	67%	18%	7%	32%
ND	48%	3%	20%	1%	6%	2%	71%	7%	6%	26%
NE	71%	3%	3%	1%	3%	0%	87%	10%	2%	3%
NH	68%	0%	0%	0%	0%	0%	100%	4%	0%	0%
NJ	64%	13%	0%	3%	21%	0%	52%	18%	3%	32%
NM	47%	11%	29%	0%	6%	1%	31%	15%	4%	40%
NV	65%	10%	1%	3%	12%	1%	52%	9%	3%	10%
NY	61%	6%	1%	6%	42%	0%	20%	9%	2%	7%
OH	56%	20%	0%	1%	43%	0%	41%	17%	9%	55%
OK	70%	18%	12%	1%	28%	1%	53%	26%	4%	41%
OR	68%	11%	6%	2%	14%	1%	60%	20%	7%	23%
PA	56%	1%	0%	1%	5%	0%	92%	21%	14%	74%
RI	80%	9%	2%	1%	8%	0%	35%	10%	2%	12%
SC	58%	3%	0%	0%	41%	0%	46%	0%	0%	0%
SD	75%	13%	5%	30%	19%	0%	44%	32%	4%	28%
TN	49%	5%	0%	0%	11%	0%	87%	10%	4%	66%
TX	70%	7%	0%	2%	32%	0%	42%	4%	2%	15%
UT	72%	11%	44%	0%	2%	1%	32%	8%	1%	9%
VA	68%	2%	1%	6%	29%	0%	47%	10%	1%	18%
VT	74%	1%	1%	2%	4%	0%	81%	10%	2%	14%
WA	55%	1%	5%	1%	3%	1%	86%	18%	3%	36%
WI	61%	4%	1%	1%	48%	0%	37%	6%	3%	12%
WV	51%	3%	0%	1%	4%	0%	94%	13%	8%	53%