Mitigating Workforce Impacts of COVID-19 and Other World Events

Greenleaf developed this article for publication in the *Journal of Emergency Management*. We hope that it will provide your organization with helpful insights for navigating the stress of the ongoing COVID-19 pandemic and other world events that affect the wellbeing of your staff and organization. The article was co-authored by the following Greenleaf staff members:

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Who is this article for?

We wrote this article for leaders and managers of organizations whose staff are routinely exposed to traumatic events or dangerous conditions in the course of their work. While written through the lens of emergency management, this framework can be applied to any sector whose staff routinely encounter intense human suffering. **In short, it is for any organization whose mission is to help, heal, or protect others**.

How can it help my organization?

This article provides options for promoting staff wellbeing that are **ethical, safe, culturally responsive**, and **do not require trained clinicians to implement**. We illustrate the framework with real world examples to show how organizations may assist staff who do not require clinical care, but who are nonetheless affected by repeated exposure to highly stressful situations.

The options described here can help **prevent further erosion of staff wellbeing and morale, minimize frequency of operational breakdowns**, and **promote a culture of trust and cohesion** within the organization.

How does this article apply outside of the acute phase of the COVID-19 pandemic?

Many organizations have shifted into a post-acute phase of pandemic operations. This new phase brings unique challenges that are likely a source of stress, such as: **Return-To-Office, staff and supply shortages**, and **continued risk of COVID-19 exposure**.

More broadly, there are a variety of other world events that can exert significant stress on staff and operations. The options offered here are relevant not only to the aftermath of COVID-19, but also to broader concerns that will continue to affect organizations for the foreseeable future.

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Trauma mitigation for the workforce: A conceptual framework applied in COVID-19 pandemic conditions

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ABSTRACT

The sudden and protracted emergency stemming from the coronavirus disease-2019 (COVID-19) pandemic presents potential exposures, or exacerbations, of psychological trauma to workforces. Organizationally significant traumatic stress warrants the trauma-informed attention of emergency managers wishing to protect the well-being of responders and prevent performance breakdowns.

This study focuses on interventions that can be applied at the organizational level without the need for specially trained clinicians. We first provide a rapid review of design principles intended to provide safe, ethical, and efficacious interventions that utilize informational and social learning principles. Next, we present a conceptual framework, drawing from the disaster management and clinical trauma evidence base, targeted to build proactive workplace programs for trauma mitigation. Duty of care and shared responsibility are discussed as a way to balance obligations and burdens of operating in milieus characterized by psychological trauma. Assuming that clinically significant trauma is handled by established systems of mental healthcare, the five case studies in this study demonstrate how empirical findings support program elements to address subclinical trauma in emergency managers and responders across sectors.

Key words: resiliency programming, trauma-informed, COVID-19, secondary traumatic stress, first responders, PEI (prevention and early intervention), pandemic, duty of care, organizational trauma, risk management

INTRODUCTION

Protecting and improving the mental health of people affected by an emergency is of paramount importance. From a public health perspective, complex emergencies and large-scale disasters give rise to serious mental health challenges.[1] In addition to impacting individuals and family systems, these mental health challenges introduce significant professional and economic implications for emergency response organizations across a variety of sectors.[2] Complex emergencies and large-scale disasters require a wide range of responders to confront mental health and psychosocial difficulties, ranging from mild to serious types. These emergency and disaster situations, which often involve rapid surges of healthcare, infrastructure, and economic need, are paradoxically the very situations that increase the likelihood that mental health needs of responders are neglected.[3] And yet, the impacts of *subclinical trauma* (defined as trauma that exerts noticeable influence on

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functioning without rising to the level of a clinical disorder) on these responders have historically received little attention in the literature on trauma. As such, we argue that the need for sustainable trauma prevention and mitigation efforts for the emergency management sector (or any sector whose workforce is exposed to traumatic stress in the course of their duties) is perhaps more urgent than ever in the context of the protracted coronavirus disease-2019 (COVID-19) pandemic.

The full spectrum of traumatic stress and the vital role of specialized clinical interventions are beyond the scope of this study and considered elsewhere.[4] This study targets interventions that can be applied at the organizational level without the need for specially trained clinicians. These interventions rely on a shared knowledge and socialization of key concepts related to the biological, psychological, and social aspects of trauma to foster a sustainable culture of resilience among emergency response workers and organizations.

In contrast to clinical definitions of post-traumatic stress or criteria for trauma-related disorders, this study maintains a broader characterization of subclinical trauma responses. Subclinical trauma responses are commonplace to responders and the organizations that manage them—people being overwhelmed by stressors and experiencing painful consequences—both at the individual and organizational levels. Just as clinically significant traumatic stress is worthy of particular attention,[5–11] subclinical traumatic stress warrants the trauma-informed attention of emergency managers wishing to protect the well-being of staff and mitigate breakdowns to operations fulfilling the organization's mission.[12]

As such, the goal of this study is to introduce a conceptual framework and accompanying interventions that may aid the emergency management sector in preventing and mitigating the impacts of trauma on responders operating during the COVID-19 emergency. We first discuss the design principles and relevant empirical literature that inform this framework, followed by five case examples that illustrate concrete applications of this framework in real-world situations. Further, by consolidating a set of interventions for organizations operating during the COVID-19 emergency, this study lays a solid foundation for organizational leaders to select program elements that may protect workforce members operating in a variety of other high-trauma environments, eg, armed conflict, human/civil rights abuses, gender-based violence, human trafficking, hate crimes, and child abuse.

DESIGN PRINCIPLES

This section specifies five values that guide decision-makers to safe, ethical, and efficacious interventions: do no harm, social support, trauma-informed approach, attending to vulnerable populations, and cultural adaptation.

Do no harm

There is growing evidence that group-based re-telling of traumatic episodes can be counterproductive or expose nonconsenting participants to new narratives of trauma.[13] Program design should, therefore, regulate the elements of interventions that could directly, or indirectly, cause harm to participants. Psychological first aid (PFA) was, in part, developed as an intervention to minimize unintended harm in the emergency context; however, the majority of PFA practice remains in the domain of psychological support teams.[14] Group-based trauma interventions all too frequently stumble into more complex clinical considerations, and therefore require skilled and trained practitioners to facilitate. Nonclinical group facilitators can announce that psychological safety will be best regained or maintained by keeping to the "here and now" of coping rather than recounting the "there and then" of frightening events. Facilitators cannot fully anticipate spontaneous emotional disclosures of traumatic narratives; therefore, facilitators must make preparations in advance for how to effectively redirect problematic "there and then" re-telling or re-living of past trauma.

Social support

Although social support may be seen as a natural human response that does not need technical consideration, it deserves special mention. Enhancing social support does not require specially trained clinicians, and it is frequently undervalued at the organizational level. Emergency managers can facilitate the removal

of barriers for responders to access families and other primary support persons for either brief or ongoing contact. Religious community or spiritual support systems can also prove calming and organizing for persons experiencing loss, uncertainty, apprehension, and/or grief. Methods of facilitating social or spiritual support will vary and should be suited to the operational context. Methods may include regular opportunities for communication with family members, social time or shared activities with trusted co-workers, and access to chaplaincy services or logging on to a group prayer/meditation.

Trauma-informed approach

The Substance Abuse and Mental Health Services Administration's *Concept of Trauma and Guidance for a Trauma-Informed Approach* provides guidance on how to optimize organizational responsiveness to trauma.[15] The four "Rs" of guidance, according to this approach, are (1) realize the varied impact of trauma; (2) recognize individual and systemic signs of trauma; (3) respond by applying knowledge about trauma into policies, procedures, and practices; and (4) actively resist re-traumatization.

To illustrate, applying a trauma-informed approach can play a role in optimizing risk communications. The emergency management community is scoped to provide the general population with accurate and up-to-date information about an unfolding emergency. Effective risk communication promotes behaviors and mindsets that mitigate unproductive fear responses that stem from the unknown.[16] We argue that effective risk communication strategies should consist of not only crisis management communications but also trauma-informed psychoeducation for responders themselves.

To mitigate trauma in emergency situations, organizations can incorporate targeted psychoeducation to promote adaptive functioning. Psychoeducation can consist of providing laypeople with examples of typical trauma reactions (palpitations, flashbacks), the difference between common reactions to trauma, reactions requiring professional intervention, healthy coping techniques (human contact, focusing on breathing), and identifying maladaptive coping responses (self-blame, withdrawal, and substance use). This enhances the capacity for both the general population and the emergency response workforce to anticipate and mitigate trauma-related challenges in emergency situations.

Coupling effective risk communication with trauma-informed psychoeducation is equally vital within, and for, the emergency management organization. Investing in a work culture of preventing and mitigating trauma promotes a sense of cohesion and trust in the organization, as well as decreases anxiety and the frequency of operational errors for responders.[17] Such investments require surprisingly little effort on the part of response organizations compared to their positive and high-yield impact for responder workforce and the general public.

Attending to vulnerable populations

A vulnerable population is a group of people who are prone to being overlooked or underserved. Several studies show higher risk for poor mental health outcomes in vulnerable subpopulations, including people of lower socioeconomic status (SES),[18,19] hearing and visually impaired individuals, and minorities.[20] Responders from these groups are often disenfranchised and marginalized within systems, and, therefore, they have limited access to mainstream resources for assistance. Additionally, these groups may manifest variations in traumatic effects and help-seeking behavior that are misunderstood or invalidated by those in decision-making roles. While these considerations are typically applied in the context of those being served by responders, they are no less relevant to the responders who may themselves be the members of historically disenfranchised or marginalized groups. As such, organizations can be better prepared for the specific monitoring and interventions that their response teams may warrant due to historical and systemic factors.

Although it is important not to over-generalize, awareness of specific cultural and situational factors characterizing different groups allows emergency response organizations to conduct outreach to groups that might otherwise not enroll for assistance. Once enrolled, assessment and interventions must be appropriately adapted to address the life circumstances of vulnerable members.

Cultural adaptation

Mental health and psychosocial support interventions should not be one-size-fits-all, taken "off the shelf" from one setting and applied to another.[21,22] Furthermore, programming is rarely 100 percent culturally competent or inclusive in its first iteration, even if culture was a part of the needs assessment. A culturally adapted intervention responds to a specific population's patterns of psychological distress and help-seeking behavior.[23,24] The needs assessment stage preceding programs should be collaborative and provide multiple modes of input, with attention on silent parties who may provide "pushback" (dissenting or divergent perspectives). Anticipatory guidance for organizational leaders includes vigilance for data that suggest cultural mismatches and the readiness to iterate programming for better fits to different populations.

A CONCEPTUAL FRAMEWORK TO SELECT PROGRAM ELEMENTS

The basis of the program elements delineated in our case studies is rooted in a growing trauma literature (Figure 1) identifying three intervention targets aimed to prevent, mitigate, and alleviate subclinical trauma.[25-28]

First, *coping-specific self-efficacy* has been identified in the literature as being a strong protective factor, which, according to a meta-analysis by Gallagher, et al., "pertains specifically to the domain of coping in the aftermath of a trauma or stressor."[29] We, therefore, emphasize coping-specific self-efficacy during, and after, pandemic emergency events as an enhancement to an effective workplace safety net at the subclinical level. Second, *purposeful action* refers not only to productive steps taken to respond specifically to job stress, but also job-related tasks to lessen the material impact of the emergency itself. At the most basic level, the act of "doing something" productive in the face of a crisis is the lived experience of not being helpless or frozen. Third, we incorporate intentional steps to promote meaningful *social cohesion*, given that both social isolation and organizational fragmentation are accelerants to trauma.

Our interventions emphasize a shared responsibility model so that the burden to manage contextual, organizational, and social stressors is not offloaded to individuals. Shared responsibility is an ethical

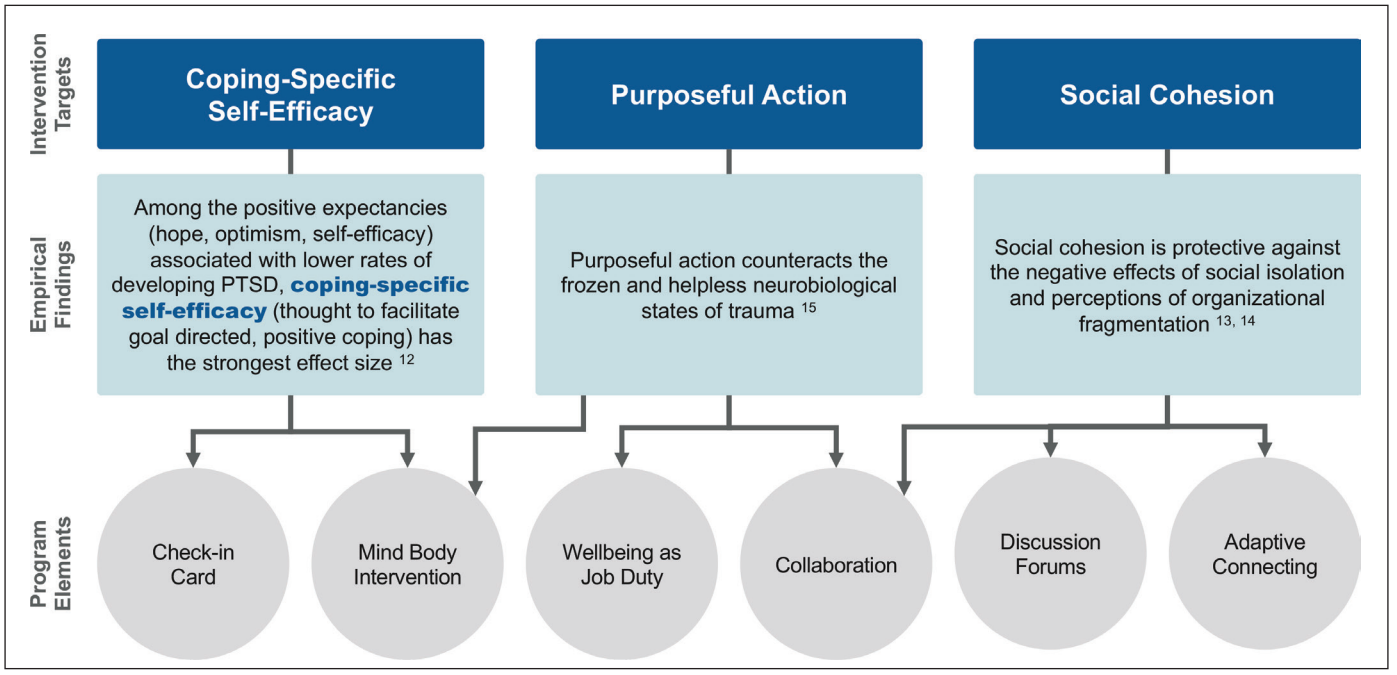

Figure 1. Intervention targets for organizations seeking to address subclinical trauma: Supporting empirical findings and accompanying program elements.

commitment that recognizes that traumatic exposures are heavily contextual. Accordingly, we take seriously the critiques of workplace training that explicitly or implicitly puts the burden of self-care and self-protection on the very individuals who are operating in harm's way.[29,30] Stress management sessions and resiliency training sometimes imply that workforces can instantly experience well-being if only they would take responsibility for doing simple techniques. Victim blaming is an extreme implication: if people are not coping well, then maybe they are not applying their training or trying hard enough. This is an unethical implication.

Organizations are positioned to take action against the traumatic burdens that originate in the context, organization, and society. In their portion of shared responsibility, organizations are ethically bound by a duty of care to take reasonable steps to reduce traumatic conditions.[31] The duty of care depends on the sector, but at minimum includes the following: open acknowledgments of the job's assumed risks, reasonable mitigation procedures, and active provision of care when harm is felt.

Accordingly, the trauma-informed approach acknowledges the "natural-ness" and matter-of-factness of traumatic exposures in particular operational environments. On top of this general message of organizational and contextual exposures are differentiated messages for specific populations and their milieus. As for the portion of shared responsibility geared toward individuals and teams, programming efforts should support positive steps toward enhanced resilient states, while presupposing different levels of baseline resilience.

This approach allows participants to hone their attention on developing or building on capacities for self-care and self-protection, as well as team care and team protection. The idea that resilience can be developed and is not a static trait, coupled with programming that underscores a commitment to shared responsibility, is key to our capacity building approach. Maintaining this critical balance in our intervention design avoids victim blaming and considers evolving cultural and contextual factors that participants face.

To illustrate the modularity and utility that emerge from the conceptual framework, the following section provides five case studies. The key program elements are selected based on needs assessments with these various organizations aiming to address the COVID-19 pandemic's contextual and novel challenges. Our interventions to mitigate subclinical trauma are "differentiated," rather than homogeneous. The selection of interventions is guided by understanding and appreciating all the different possibilities that may cause staff and operations to suffer subclinical trauma.[32]

TRAUMA MITIGATION: FROM CONCEPT TO APPLICATION

Case 1: Health and human services organizations

Milieu and demographic: Audience were HR directors and operations managers at nursing homes and residential centers for autism, disabilities and neurorehabilitation. As per the experience with severe acute respiratory syndrome (SARS) pandemic influenza, these organizations were preparing for the potential of high morbidity and mortality, high healthcare demands, high absenteeism among healthcare workers, rationing of basic healthcare supplies, and extraordinary stress.[33] While this was not a group of organizations that would experience a surge of acutely ill patients arriving at their doorsteps, the trauma of the pandemic was felt in fears of resource rationing and "being cut off" in a surge. As mentioned above, we understand mental health concerns are more likely to be neglected when a surge overwhelms personnel, resources, and physical facilities.

Differentiated program elements: We curated a program entitled "Caregivers Cope with COVID-19: Stress Resilience." A video webinar and web-based resource lists provided psychoeducation on common reasons and remedies for breakdowns during a sudden and protracted public health crisis. As per leading practice healthcare system interventions during SARS pandemic influenza, the content emphasized clear communication, normalizing individual responses to stress, collaboration between disciplines, and the provision of relevant support.[34]

More specifically, the trauma psychoeducation included illustrations of Fight/Flight/Freeze reactions. Teachings related to compassion and nonjudging organizational responses to people and teams

exhibiting patterns of nervous system arousal with "Too much" (hyperarousal) and "Too little" (avoidance, numbing) were also included. The group was offered a check-in card to track the intensity of stress and take appropriate action. Since this was a group with management representatives from several different organizations, the program does *not* take the steps to socialize the use of the card as a shared vocabulary (as we do in cohorts that are from the same workforce). Finally, to enable social cohesion, we taught the participants "Do No Harm" adaptive connecting, which counteracts negative connecting behaviors, eg, stories of how "things have been worse," or allowing everyone to talk about grief and trauma without being prepared for people to mention content that traumatizes others, that might inadvertently increase arousal and add to distress.

Case 2: Medical research and health advocacy organization

Milieu and demographic: Audience included physicians practicing occupational medicine and preventive medicine, public health practitioners, and social science researchers. This group expressed a continual, chronic workplace exposure to traumatic circumstances, independent of the pandemic. Specific pandemic content was requested to empathize with and adapt to the trauma of the communities with whom the staff interacted in their research and advocacy.

Differentiated program elements: This was a video webinar entitled "PPE for Psychological Exposures: Resiliency for Operational Stress and Vicarious Trauma." We focused on trauma psychoeducation with discussion on organizational interventions to meet the workforce's need for protection and social interventions to be trauma-informed in their work with communities. Content included illustrations of Fight/Flight/Freeze reactions. As in case 1, teachings related to compassion and nonjudging organizational responses were also included. To combat dysregulation, many participants opted in to do real-time practice of mind–body interventions to develop self-efficacy around regulating bodily responses to distressing situations. Among the objectives of the session was to normalize workplace dialogue on traumatic reactions. Such dialogues should be considered a bona fide job duty—necessary and required to secure individual well-being, sustain longevity in the occupational sector, and maintain high team performance. This follows the literature on building confidence in a group's ability to contribute to positive outcomes (Figure 1).[35-37]

The group was offered a check-in card to track the intensity of stress and take appropriate action. Since this was a cohort from the same workforce, we took steps to socialize the use of a check-in card as a shared vocabulary among colleagues. Finally, there was discussion on how a broader understanding of trauma within the organization would make its way into their programming with beneficiary communities. This ability to be trauma-informed in the course of doing their work added to the purposeful action (Figure 1) sense of the session, providing additional value for this cohort.

Case 3: International development staff coordinating emergency response

Milieu and demographic: Within a large, globally dispersed workforce, this team of 30–40 health experts were responsible for pandemic response in a large metropolis in the Middle East. The team paused its regular operations and coordinated safety measures with in-country partners and government agencies to stabilize the situation. They sought to amplify protective factors and promote positive coping as a social unit (Figure 1).

Differentiated program elements: We curated a program entitled "Maintaining Healthy Operations with COVID-19." In order to normalize individual responses to stress, our trauma psychoeducation provided illustrations of Fight/Flight/Freeze reactions. In order to stimulate collaboration between disciplines, we discussed compassion and nonjudging organizational responses to people and teams exhibiting patterns of nervous system arousal with "Too much" (hyperarousal) and "Too little" (avoidance, numbing).

To combat dysregulation, many participants opted in to do real-time practice of mind–body interventions to develop coping specific self-efficacy (Figure 1) around regulating distressing reactions as mentioned

in case 2. The group was offered a check-in card to track the intensity of stress and take appropriate action. Since this was a cohort from the same workforce, we took steps to socialize the use of the card as a shared vocabulary among colleagues. Finally, to enhance social cohesion as with cases 1 and 2, we teach the participants "Do No Harm" adaptive connecting, which identifies negative connecting behaviors that might inadvertently increase arousal and add to distress. We set aside the time for a discussion forum in which adaptive connecting was practiced among the participants with our facilitators tagging good practices.

Case 4: Internal offering to our own geographically dispersed staff

Milieu and demographic: Our whole workforce rapidly converted to remote work and validated their own pandemic challenges.

Differentiated program elements: We curated a program entitled "Optimal Response in Pandemic Conditions." A video webinar and web-based resource lists provided psychoeducation on common reasons and remedies for breakdowns during a sudden and protracted public health crisis. We focused on trauma psychoeducation with discussion on organizational interventions to meet the workforce's need for additional job training. Content included illustrations of Fight/Flight/Freeze reactions. As in case 3, in order to stimulate collaboration between disciplines, we discussed compassion and nonjudging organizational responses to people and teams exhibiting patterns of nervous system arousal with "Too much" (hyperarousal) and "Too little" (avoidance, numbing). To combat dysregulation, many participants opted in to do real-time practice of mind–body interventions to develop coping specific self-efficacy around regulating distressing reactions.

The group was offered a check-in card to track the intensity of stress and take appropriate action. Since this was a cohort from the same workforce, we took steps to socialize the use of the card as a shared vocabulary among colleagues. Finally, to enhance social cohesion, we teach the participants "Do No Harm" adaptive connecting, which identifies negative connecting behaviors that might inadvertently increase arousal and add to distress.

Case 5: US Government agency with essential roles

Milieu and demographic: Large federal operation in which several change management processes were underway prior to the pandemic. A proactive management had concern about a workforce that was signaling significant difficulties, including trauma in response to the pandemic.

Differentiated program elements: We curated a multi-week program ranging from senior-level facilitation to multiple manager trainings to address traumatic stresses felt among the workforce and the pressure of novel pandemic-related stresses. We started with learning the values of the organization's leaders and identifying the strategic priorities for elevating their response to overwhelming stress. The results of the facilitation were folded into webinar content for two cohorts of managers, during which we validated the appropriateness of a check-in card to track the intensity of stress and take appropriate action. We ensured that managers would offer this intervention only on an opt-in basis and staff would not be compelled to reveal their coping status.

Then during two large webinars covering the entire workforce, we focused on trauma psychoeducation with discussion on organizational interventions to meet the workforce's need for additional job training. As with earlier cases, content included teaching Fight/Flight/Freeze reactions, compassion and nonjudging organizational responses to people and teams exhibiting patterns of nervous system arousal with "Too much" (hyperarousal) and "Too little" (avoidance, numbing).

The check-in card learning involved tabletop exercises using polling tools to help calibrate the personal usefulness of tracking intensity of stress. Since this was a cohort from the same workforce, we took steps to socialize the use of the card as a shared vocabulary among colleagues. By instituting this program at the organizational level with strong management involvement, this agency engaged in purposeful action that counteracted the relative paralysis and helplessness felt by many in the COVID-19 pandemic.

CONCLUSION

There is still much room for further research on how to best apply current advances in neuroscience and trauma treatments at an organizational level. Together, the above-mentioned design principles, conceptual framework, and case studies will hopefully add to the growing literature of translational science, including the dissemination and implementation of evidence-based interventions for system-wide change.

The workforce-level trauma interventions highlighted in this study, in combination with the existing body of translational research, make a compelling argument for how a macro-level intervention helps across the spectrum of trauma presentations. Intervening at the organizational level supports prevention, mitigation, and alleviation of trauma, while simultaneously promoting well-being and enhancing resilience skills. Macro-level interventions are appealing for their (1) expansive reach, (2) potential for increasing access to vulnerable groups, and (3) more sustainable intervention models.

Organizations experience the impact of trauma caused by emergencies when people are overwhelmed, terrorized, and frozen. This impact manifests as increased suffering, reduced performance, operational breakdown, and diminished quality of life. In addition to the provision of clinical care for those with serious syndromes, the ability to add interventions targeting subclinical trauma can be a significant contributor to sustaining workforce performance, well-being, and longevity.

In sum, this intersection between public health, mental health, organizational development, and emergency management represents an opportunity to prepare, intervene, and prevent morbidity in the case of traumatic events. By intervening at the organizational level, programs can effectively build organizational, sectoral, and societal capacity to respond to protracted traumatic exposures, such as the COVID-19 pandemic.

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All listed authors are paid employees of Greenleaf Integrative. Greenleaf Integrative is a private sector, for-profit entity that provides services to mitigate trauma and promote organizational well-being for both public and private entities.

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