

COVID-19, FRONTLINE
RESPONDERS AND MENTAL
HEALTH

The impact of this global pandemic on mental wellness has been profound, and the consequences are still emerging. This book captures the direct and indirect psychological sequelae of surviving a collective trauma, along with critical lessons learned for congregant settings like long-term care facilities and prisons.

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Senior Expert & Vice President at Falcon Inc.*

Spotlighting the acute and lingering distress that the COVID-19 pandemic has heaped on responders, other essential workers, and the diverse communities they serve, this books make the compelling case as to why public health emergency management systems must demonstrate greater parity between mental health and physical health going forward.

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COVID-19, FRONTLINE RESPONDERS AND MENTAL HEALTH

A Playbook for Delivering
Resilient Public Health Systems
Post-Pandemic

Edited by

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University of Delaware, USA



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INVESTOR IN PEOPLE

To my husband, Michael, and my children, Ian and Lila, and to all of those whose lives have been impacted by this pandemic and our response to it.

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CONTENTS

About the Contributors	xi
Acknowledgments	xviii
Introduction: Mental Health Impacts of Disasters and Emergencies	1
<i>Jennifer A. Horney</i>	
1. Older Adults' Behavioral Health During the COVID-19 Pandemic	9
<i>Vanessa Parks, Grace Hindmarch, Sonny S. Patel and Aaron Clark-Ginsberg</i>	
2. COVID-19 and Women	23
<i>Sarah E. Scales and Jennifer A. Horney</i>	
3. Impacts of COVID-19 on Children and Adolescent Well-Being	43
<i>Yulissa Rodriguez and Rita V. Burke</i>	
4. Mental Health Among LGBTQ+ Communities in the Context of COVID-19	55
<i>Gregory Phillips II, Dylan Felt, Megan M. Ruprecht and Lauren B. Beach</i>	
5. Impacts of the COVID-19 Response on Populations with Chronic Conditions and Developmental Disabilities	79
<i>Jennifer Trivedi and Megan Stevens</i>	

	Box 1: Being Immunocompromised, Accessing Care, and Coping with Mental Health in COVID-19, <i>Jennifer Trivedi</i>	81
	Box 2: A Qualitative Study of Parents of Disabled Children, <i>Megan Stevens</i>	86
6.	Mental Health and Quality of Life in Long-Term Care During the Pandemic <i>Caitlin McArthur, Reem T. Mulla, Luke A. Turcotte, Jessica Chi-Yen Chu, Micaela Jantzi and John P. Hirdes</i>	97
7.	Mental Health in Rural America During COVID-19 and Beyond <i>J. Tom Mueller and Alexis A. Merdjanoff</i>	119
	Box 1: COVID-19 in the Rural American West, <i>J. Tom Mueller and Alexis A. Merdjanoff</i>	126
8.	Impacts of the COVID-19 Response on Frontline Healthcare Workers <i>Mari Fischer and Jennifer A. Horney</i>	135
	Box 1: COVID-19 and EMS Workers, <i>Maria Mendez Garza</i>	140
	Box 2: Mental Health Impacts of COVID-19 in Veterinary Medicine, <i>Danielle Lecce</i>	141
9.	Impacts of the COVID-19 Response on the Governmental Public Health Workforce <i>Kahler W. Stone</i>	153
	Box 1: A Voice from the Field: A California COVID-19 Epidemiologist, <i>Jake M. Pry</i>	164
10.	Impacts of the COVID-19 Response on the Academic Public Health Workforce <i>Kristina W. Kintziger and Jennifer A. Horney</i>	177
11.	Mental Health Impacts on Other Essential Workers <i>Jennifer A. Horney</i>	199

Box 1: Dieticians as Frontline Responders, *Denine Stracker* 200

Box 2: Unintended Consequences of COVID-19 Policies on the Mental Health of Emergency Services Workers, *Ashleigh Bothwell* 204

12. Inequities in the Mental Health Impacts on Frontline Responders and Essential Workers 211
Ibraheem M. Karaye

13. Lessons from the Response 227
Jennifer A. Horney

Box 1: Responding to the Overdose Epidemic During COVID-19 in North Carolina: Trends, Challenges, and Recommendations for Surveillance and Response, *Mary E. Cox, Amy Ising, Mike Dolan Fliss, and Scott Proescholdbell* 229

Box 2: Hope in the First State, *Joshua L. Kelly and Erin N. Norris* 234

Conclusions and Common Themes 243
Jennifer A. Horney

Index 249

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The COVID-19 pandemic has impacted the physical and mental health of millions in both direct and indirect ways. Stress, anxiety, and loneliness associated with fears about contracting COVID-19 and the experiences of loss, financial insecurity, and social isolation have worsened our mental health generally, with more adults reporting symptoms of mental health disorders during the pandemic compared with the pre-pandemic period. We also know there are highly vulnerable subpopulations for whom the mental health impacts of the COVID-19 pandemic can be more severe, including children, caregivers, minority populations, and those with limited access to care. Frontline responders – healthcare providers, public health practitioners, and other essential workers are also at higher risk. The goal of this book is to hear their voices and to consider their recommendations for the critical and necessary changes that will help to build our resilience to the mental health impacts of disasters prior to the next public health emergency. This book would not have been possible without the contributions of many people, working within their own areas of expertise to address the impacts of the COVID-19 pandemic – and our response to it – on mental health.

INTRODUCTION: MENTAL HEALTH IMPACTS OF DISASTERS AND EMERGENCIES

JENNIFER A. HORNEY

Keywords: Disaster severity; disaster frequency; social determinants; front-line workers; barriers to mental healthcare

DISASTERS AND MENTAL HEALTH

Associations between exposure to disasters and emergencies and mental health sequelae have been well documented, with studies reporting up to 40% of disaster-impacted populations experience mental health impacts. While short-term stressors can be overcome by resilient individuals, some of those impacted by disasters and emergencies – particularly long-lasting and severe events like the COVID-19 pandemic – will experience long-term post-traumatic stress disorder (PTSD), severe depression, suicidality, and other severe mental health outcomes. Repeated exposure to disasters, as well as exposure to more severe disasters, has multiplicative impacts on the mental health of both residents and responders, particularly in the most disaster-prone regions of the United States.

Prevalence of Disasters

Disasters and emergencies of all types are increasing in frequency and severity. In addition, the temporal and spatial extent of the COVID-19 pandemic, which has as of now impacted every part of the world for close to three

years, means that there have been hundreds of concurrent disasters requiring a response while the response to the COVID-19 pandemic was ongoing. Since the January 2020 declaration of a public health emergency in response to the COVID-19 pandemic, nearly 200 major disaster declarations have been issued by the President of the United States, most for non-COVID-19 disasters (Federal Emergency Management Agency (FEMA), n.d.). In addition, during the COVID-19 response, other public health emergency declarations have been issued by the Secretary of the US Department of Health and Human Services in response to earthquakes, wildfires, hurricanes, winter storms, and the opioid crisis.

Vulnerable Populations

Not everyone is equally impacted by a disaster. For example, those who are consistently exposed to ongoing stressors – financial worry, occupational instability, insecure housing, and chronic health conditions – before a disaster or emergency are at higher risk for post-disaster mental illness. Although it can be difficult to measure the direct associations between these Social Determinants of Health (SDOH) – defined by the Centers for Disease Control and Prevention as the conditions in places where people live, learn, work, and play (CDC, 2021) – and health outcomes due to complex causal pathways, these linkages may be easier to assess in a disaster or emergency setting. For example, it is relatively easy to understand that residents of older, unelevated homes in regions with little building code enforcement would be more vulnerable to a hurricane’s impacts (Highfield, Peacock, & Van Zandt, 2014) or that those living in an overcrowded or multigenerational households would have a nearly 80% increased risk for COVID-19 exposure and infection (Ghosh et al., 2021). However, more work is needed to develop, implement, and maintain funding for interventions that interrupt the pathways between inequitable disaster exposure and mental health disorders, including comprehensive emergency preparedness and other resilience building approaches.

Disasters, and the actions taken in response to them such as evacuation or shelter-in-place orders, interrupt access to mental health care and treatment, social supports, and the development of self-efficacy. This puts those

with a pre-disaster mental illness at an increased risk for post-disaster PTSD, depression, and substance use disorders, perhaps because these conditions can both intensify disaster exposure and increase vulnerability to a disaster's effects (Goldmann & Galea, 2014). Disasters and disaster response can also intensify prejudice, stigma, and discrimination among groups who experience multiple forms of marginalization (Goldsmith, Raditz, & Mendez, In Press). For example, prior to the COVID-19 pandemic, at least 40% of LGBTQ+ youth had considered suicide; COVID-19 control measures such as stay-at-home orders often meant LGBTQ+ youth had no alternative to staying at home with unsupportive families, which may increase suicide ideation. In addition, women, children, younger and middle-aged adults, those living in poverty, racial and ethnic minorities, and those without social support have also been more vulnerable to post-disaster psychological outcomes ranging from fear, panic, and emotional distress to anxiety, depression, PTSD, and substance use disorders. The risks to the mental health of many of these groups will be addressed in subsequent sections of this book.

Workers in High-Risk Occupations

The increased risk of mental health impacts among frontline emergency responders has been well-documented. Exposure to trauma as part of professional responsibilities has been associated with PTSD, depression, drug and alcohol disorders (Kleim & Westphal, 2011), emotional exhaustion, and suicide risk (Edwards & Wilkerson, 2020). More, and more severe, mental health consequences among frontline responders are also associated with factors such as the number and severity of events, being a responder to an intentional event like terrorism, working with those injured or killed in an emergency or disaster and their families, and having less training in disaster response (Kleim & Westphal, 2011). Results from research, as well as the first-hand experiences of emergency medical technicians (EMTs), fire services, and other frontline emergency responders, are included in several chapters of this book.

Similar to other responders to disasters and emergencies, there is also ample evidence of the mental health impacts of response among frontline,

patient facing healthcare providers. Among healthcare workers responding to the Severe Acute Respiratory Syndrome (SARS) outbreak in 2002 and 2003, higher levels of emotional distress were reported among those reporting the highest perceptions of stigma against healthcare workers, fear of infection, fear of exposing or infecting family members, and the responsibility to care for co-workers as patients (Nickell et al., 2004). Similarly, during the response to the novel influenza A (H1N1) pandemic in 2009, anxiety, stress, worry, and psychological distress were highest among those working in high-risk environments, who feared for their personal health, and were concerned about infecting their families (Goulia, Mantas, Dimitroula, Mantis, & Hyphantis, 2010; Matsuishi et al., 2012). As part of this book, we hear from nurses, medical laboratory workers, dieticians and others about the impacts of the COVID-19 pandemic, and the pandemic response, on their professions and highlight disparities among frontline and essential workers.

The public health workforce has been a less visible, but highly integral, part of the COVID-19 response. Charged with the implementation of public health control measures, disease surveillance, contact tracing, the development and implementation of testing and vaccination programs, and much of the risk communication messaging around the pandemic and the pandemic response, the public health workforce has faced unprecedented mental health impacts. Between March 2020 and January 2021, nearly 1,500 incidents of harassment were reported by state and local health officers, with more than 250 of them resigning, retiring, or being fired due to politicization, marginalization, and villianization (Ward, Stone, Mui, & Resnick, 2022). A fall 2020 assessment of governmental and academic public workers found high levels of burnout (66%) and reductions of close to 25% in the number of public health workers who intended to stay in the public health workforce as compared to their January 2020 plans (Stone, Kintziger, Jagger, & Horney, 2021). Among public health workers in US state, tribal, local, and territorial public health departments, more than half reported at least one mental health condition – including depression, anxiety, PTSD, and suicidal ideation – during spring 2021 (Bryant-Genevier, Rao, Lopes-Cardozo, et al., 2021). Although this book is centered in many ways on various aspects of public health systems' roles in the COVID-19 pandemic response, these experiences, and the changes needed going forward, are discussed for both academic and government public health workers.

COVID-19'S IMPACT ON THE PREVALENCE OF MENTAL HEALTH CONDITIONS AND ACCESS TO CARE

Prior to the COVID-19 pandemic, the prevalence of poor mental health days, defined as self-reported poor mental health in at least 14 of the last 30 days, among US adults was 13.8% ([National Center for Chronic Disease Prevention & Health Promotion, 2019](#)). Among US children, approximately 16.5% had at least one mental health disorder, with the incidence of mental health disorders among children increasing over the last several decades ([Whitney & Peterson, 2019](#)).

The impacts of the COVID-19 response on mental health have been unprecedented. Although there is still little longitudinal data, and little data beyond wealthy, industrialized countries, panel data and cross-sectional studies of mental health among nearly every subgroup that has been assessed – healthcare providers, public health workers, teachers and students, college students and higher education faculty and staff – has found substantial increases in the prevalence of poor mental health since the start of the COVID-19 pandemic. Structural disparities and disparities in the SDOH that have been intensified by the pandemic have led to disproportionately larger adverse impacts among those with greater financial insecurity, including low wage essential workers and racial and ethnic minority populations. While the list of risk factors goes on and on, at its most basic, the grief associated with the death of a loved one that is often cited as an individual's "worst traumatic event" has now been experienced by tens of millions as the US death toll exceeds 1 million people ([Purtle, 2020](#)).

As the need to increase access to mental health services grows in light of the COVID-19 pandemic's impacts, stigma, cost, access to technology and effectiveness of telehealth, and existing workforce shortages exacerbated by mental health professional's own burnout resulting from the COVID-19 pandemic will continue to limit access. The mental health services infrastructure of the United States was woefully inadequate prior before COVID-19. Prior to the pandemic, only 6 in 10 US Counties had at least one mental health facility that provided treatment for children and adolescents ([Cummings, Wen, & Druss, 2013](#)). Fewer psychiatrists accepted any type of insurance compared to other physician specialties ([Bishop, Press, Keyhani, & Pincus, 2014](#)). Emotional contagion, compassion fatigue, and low therapeutic effectiveness, among other factors, are leading to burnout among mental health

professionals (Joshi & Sharma, 2020). More data are urgently needed to understand practice-based, regulatory, and billing challenges associated with the provision of telehealth to move forward with best practices for psychiatric virtual service delivery (Folk et al., 2022).

WHAT IS NEEDED NOW?

As the frequency and severity of disasters increases, it is no longer enough just to document the mental health impacts of disasters. Action is needed to protect everyone, including all types of frontline and essential responders as well as vulnerable population subgroups, from both the short- and long-term impacts of the mental health consequences of disasters and emergencies. In this book, we hear from experts in various fields working in research, practice, clinical, and community settings. Their experience working directly with populations whose mental health has been impacted by the COVID-19 pandemic in different ways can provide us a roadmap for a more resilient post-pandemic future if we can find the will, and identify the resources necessary, to follow it.

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