

# Preface

This book was conceived during the peak of the COVID-19 pandemic in the United States, as we watched and listened in dismay, while fellow health care and public health professionals struggled to survive and help patients, in what could only be described as a storm that caught everyone unaware. The COVID-19 pandemic was an eye-opener in showing the world just how unprepared it is to deal with global disasters. Continuing into 2021, the pandemic has shown few signs of abating. Meanwhile, other disasters such as hurricanes, wildfires, storms, earthquakes, and many others have continued to disrupt societies, complicate recovery and care, and increase existing disparities.

Indeed, humanity has proven to be resilient as it moves through this pandemic and other disasters. Unfortunately, it is through the illnesses and deaths of millions of people worldwide—the human toll of the COVID-19 pandemic, that significant gaps in preparedness and responses have been revealed, providing invaluable learning opportunities that must be translated into actionable discourse. For example, wide-ranging consequences of the mental and emotional health toll of the pandemic in the long term remain to be addressed.

A key question that every health care and public health professional needs to ask themselves is “How could we be better prepared?” Subsequent questions about guidance, continuing professional development, sustainability beyond emergencies, and ethical and legal aspects of care provision beget careful deliberation and thoughtfulness to reap long-term benefits. The interconnectedness amongst individuals, communities, and systems must be explored when thinking about complex humanitarian emergencies that necessitate provision of medical and humanitarian aid (food, water, shelter, etc.) along with the necessary expedients to facilitate community recovery and build resilience.

Public health is often reactive, and sometimes reactionary. In the emergency preparedness world, a common refrain is that “failure to plan often means planning to fail.” On the one hand, there are several disaster management organizations; individuals; and systems that are involved, well-trained, and brought together to address emergent situations, while on the other hand, communities are relatively lesser-prepared to deal with large-scale disasters and emergencies that have significant potential for widespread consequences.

Building community-level resiliency and developing systems to address disasters and emergencies both in the short-term and their consequences in the long-term, through trained pharmacy professionals forms the premise of this book.

Our emphasis in the book is to advocate for fellow health care professionals, policy makers, and others to be “proactive and prioritize prevention.” Specifically, we focus on the expanded role of pharmacists and opportunities for pharmacy professionals during disasters and emergencies. We sincerely urge everyone to think about the next disaster and consider preparedness and responsiveness as their highest priority. With the belief and positive outlook that tomorrow will be better than today, we reflect on the lessons learned from the past, make progress in the present, and project optimism for the future.

To our knowledge, this is the first book that guides pharmacy professionals, educators, leaders, and policy makers in planning for disasters and emergencies in an interdisciplinary context to address community response and recovery. In addition to providing knowledge and resources on disaster and emergency preparedness and response, the 9 chapters offer practical applications, real-world experiences through case studies and feature profiles, as well as reflection questions.

Over 30 authors and reviewers with experience and provision in public health and pharmacy emergency preparedness and response across the country contributed to the content development and refereed this book. For example, there is guidance from those who have served at the local, state, national, and global levels such as the Medical Reserve Corps (MRC), Disaster Medical Assistance Team (DMAT), deployment with the Federal Emergency Management Agency (FEMA), and global health medical service trips (MST).

Chapters 1 and 2 provide a foundational knowledge of public health preparedness and response, including an overview of disasters and emergencies; frameworks; resources; and opportunities at the federal, state, and local levels with application to and scope of practice for pharmacy professionals.

Chapter 3 covers education and training resources for pharmacy professionals, including pharmacy education, dual-degree programs, postgraduate training, continuing professional development, as well as job descriptions for pharmacy disaster coordinator and committee.

Chapter 4 focuses on individual leadership, organizational planning, and community partnerships. The authors review organizational planning processes in the context of collaboration with public health agencies and community organizations, and also discuss planning strategies and partnerships for effective preparedness and response.

Chapter 5 focuses on disaster response and countermeasures—chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE). The authors provide specific strategies for disaster and emergency response, including assembling; delivering; and employing relevant medical countermeasures, disaster drugs, and other acute care drugs and supplies needed during natural or human-caused disasters.

Chapter 6 covers post-disaster recovery for patients, providers, and communities. The authors define humanitarian aspects with emphasis on pharmacy, specifically treatments in the context of community pharmacy. They further discuss workforce recovery, opportunities for partnerships, and mental health strategies to sustain services and treatments.

Chapter 7 takes a global turn with an emphasis on humanitarian response and medical service trips in global health, including references, competencies, and self-assessment. The authors describe the impact of disasters and emergencies on humanitarian service trips, as well as ethical and legal considerations. They discuss competencies required for pharmacists and the role of pharmacy in non-governmental organizations and humanitarian service, including medication supply chains, and service provision to rural and vulnerable populations.

In chapter 8, the authors discuss the importance of communication, and application of telehealth during disasters and emergencies. They review factors affecting an individual’s response to communication and possible challenges to effective communication. They also examine the differences in telehealth applications and explore the use of telehealth in disasters and emergencies.

Chapter 9 covers ethical and legal implications and advocacy related to disasters and emergencies. The authors outline the pharmacist’s role in public health emergencies and compare state and federal laws/policies on roles and scope of practice during disasters. They define liability and the balance

between public health versus individual civil liberty. Additionally, they discuss ethical principles and legal considerations in disasters and emergencies, including emergency use authorization.

In summary, this book provides a comprehensive approach to systematic information and references for pharmacy professionals at all levels of readiness—from novice to experienced—in emergency preparedness and response. A pledge in the pharmacist's oath states, "I will accept the lifelong obligation to improve my professional knowledge and competence." This book may be viewed through the lens of continuing professional development for pharmacy professionals, and provide opportunities to expand their current horizon to encompass emergency preparedness and response as part of the broader public health community.

We humbly believe that this book will raise awareness, appeal to the renewed interest in disaster and emergency preparedness and response, and fill a gap in knowledge and information to empower better prepared pharmacy professionals. Finally, we hope that readers enjoy the stories, anecdotes, and commentaries from their peers in the field, and will use the book as a resource in their toolkit when preparing for the next disaster or emergency.