

INITIATIVES IN STRATEGIC STUDIES: ISSUES AND POLICIES



RESPONDING TO CATASTROPHIC EVENTS

Consequence Management and Policies

JEFFREY A. LARSEN

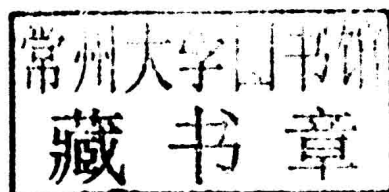


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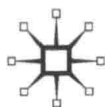
CONSEQUENCE MANAGEMENT AND POLICIES

Edited by

Jeffrey A. Larsen



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Edited by Jeffrey A. Larsen

FOREWORD

The United States faces a growing spectrum of natural and man-made threats. Hurricanes, tsunamis, earthquakes, and other naturally occurring disasters will continue to cause damage to infrastructure and loss of life. More states will have the capacity and intent to cause wide-scale lethality and damage. Increasingly, nonstate actors are being empowered in ways once limited only to states. Advances in biotechnology and chemistry, in particular, will lead to new and powerful beneficial advances in science and public health but will also provide, to those with hostile intent, new tools to attack populations and infrastructure. As new actors emerge with the capacity to create large scale lethal effects, traditional rivalries will not diminish; they will remain and perhaps even grow. The prospect of surprise—that we will not be able to anticipate or detect all the threats that are looming—is a reality in today’s security environment. If “surprise is likely,” it is critical that across the local, state, and national response framework the United States is prepared to manage the consequences arising from these natural or manmade threats. The purpose of this edited volume is to inform the broader response community about consequence management and stimulate thinking on how this community can improve response capabilities.

Nearly 20 years ago, the Center for the Study of Weapons of Mass Destruction at National Defense University started to think hard about the operational impacts of chemical, biological, radiological, and nuclear (CBRN) weapons on military operations. This effort evolved as the center realized the importance of understanding how CBRN weapons or the threat of their use would impact civilian populations and how civilian and military leadership would respond if these weapons were used. For years, the center conducted research and other activities such as simulations and tabletop exercises within the Department of Defense, on Capitol Hill, and throughout the other federal departments to understand the importance of how information was managed and used in making decisions in response to catastrophic events. Starting in 1999, the center began seriously looking at WMD consequence management. Following the attacks of September 11, 2001, this effort focused increasingly on consequence management in response to WMD terrorism (including bioterrorism). By the mid 2000s, it had grown to include large-scale domestic and international responses to naturally occurring events. During this time, center personnel supported response activities including those associated with the 2004 Asian tsunami, Hurricane Katrina,

the Haiti earthquake and the Fukushima nuclear crisis. As a teaching element of National Defense University, the WMD Center imbeds these experiences and the lessons from these and other cases into the curriculum.

Since 2006, with the support of the Defense Threat Reduction Agency, the center has been offering a new course on Catastrophic Response and Consequence Management. This class brings together in a classroom setting senior military and civilian leaders with the first response and emergency management communities to interact and learn from each other. The course draws on case studies (three of which are included in this volume), expert presentations and discussions, and at least two in-class tabletop exercises. Readings are drawn from earlier draft chapters of this edition and this book will form the core written material for the class beginning in spring 2013.

This edited volume is essential reading for civilian and military policy makers, emergency responders, students of crisis response, and all those potentially affected by a catastrophic event. Indeed, given the natural and manmade threats we face, I believe this volume offers something for everyone. Understanding how an emergency can become a crisis and a crisis a catastrophe is central to providing effective disaster relief and the life you save may be your own. Specifically, I urge faculty and staff involved in educating and training students in courses that involve homeland security, emergency management, crisis response, and risk management to adopt this book.

Finally, thanks are due to the editors and authors who spent four years developing, refining, and ultimately publishing this book. Thanks to Jim Wirtz, Jerry Barnhill, Greg Moser, Garry Briese, Richard Love, Pat Pentland, Rocky Gillette, George Haddow, Brian Lewis, Jessica Iannotti, Shane Smith, and Kerry Kartchner. I want to extend a personal note of thanks to Jeffrey Larsen and his team at Larsen Consulting who patiently and steadfastly remained committed to this book and to the principles of consequence management and catastrophic response. While more scholarship is sorely needed on the issue of consequence management and catastrophic response, Jeff and the authors of these excellent chapters go quite a long way in filling a critical gap in our collective understanding.

DR. JOHN F. REICHART
Director, Center for the Study of
Weapons of Mass Destruction
National Defense University
Washington, DC
November 2012

PREFACE

The conceptual origins of this project came from the Center for the Study of Weapons of Mass Destruction at National Defense University. In particular, Director John Reichert and members of his senior staff, especially Richard Love, Forrest Waller, and Seth Carus, envisioned a textbook that would highlight the issues and approaches to consequence management that could be used in classrooms at the war colleges, military academies, and other joint professional military education (PME) programs. Rich teaches a course on consequence management at the National War College, and it was his vision to have a book dedicated to the subject that he could use at NDU and that would be available more broadly, as well. NDU contracted Larsen Consulting Group to develop the concept, find the best authors, and hold a kickoff workshop in Washington, DC in 2009. Some of the chapter authors were known commodities, having served as guest lecturers in Rich's NDU class. Others were friends or colleagues who knew the subject well. The draft chapters were written and edited, and then the project languished for a period while the Department of Defense conducted a security review of the manuscript and the slow wheels of the bureaucracy ground on. Eventually, NDU realized it would be unable to finish the book in-house, so Rich asked me to finalize the manuscript. This longer-than-normal book development process allowed us to produce this excellent collection of essays, all of which were updated in the summer and fall of 2012.

I would like to thank Rich and the leadership of the WMD Center for the opportunity to tackle this project. I also want to acknowledge the hard work of the editorial team that reviewed early drafts of the chapters, including Kathy Livornese and Jenifer Jessep of Larsen Consulting, James Smith of the Air Force Institute for National Security Studies, and Erin Mahan and Natasha Bajema at NDU. The latter two analysts also helped organize and manage the authors' workshop. For administrative support at Larsen Consulting, my thanks to Laurie Bossert for learning the complicated government contracting software, and to Seth Carus at NDU for dealing with the contracting world at his end.

I also want to acknowledge the support of Matt Kopel, Brian O'Connor, and Scarlet Neath at Palgrave Macmillan, and Deepa John and the copy-editing staff at Newgen Imaging Systems for their close attention to detail and their shared interest in producing a top-quality book. Finally, thanks to Kurt Klingenberg for applying his years of experience in homeland security

to a critical review of the manuscript during the copyediting phase, and to Carolyn Larsen for putting the index together.

While most of the chapters in this volume have been approved by a Department of Defense security review prior to publication, it remains nonetheless true that the opinions expressed by the authors of this book do not necessarily reflect the official positions of Larsen Consulting, National Defense University, the Department of Defense, or any other agency of the US government. Any factual errors that remain can be laid on my doorstep. Try not to wake the dog.

DR. JEFFREY A. LARSEN
Colorado Springs
February 2013

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PART I
BACKGROUND



DEALING WITH DISASTER

Jeffrey A. Larsen

All disasters are local.

On a hot, dry afternoon, typical of the American West in early summer, with bright sunshine and humidity levels in single digits, the people living along the Front Range of the Rocky Mountains were enjoying another beautiful day in the high altitude prairie of eastern Colorado—the kind of day that makes the region so popular among those who have discovered its secrets. But those conditions also made it a prime day for fire. The people of Colorado Springs, while enjoying the hot, lazy afternoon, also knew that the city was in the middle of a historic drought, with tinder dry conditions in the woods and grasslands of their city. Worse, for the fourth day in a row they could see a column of smoke rising from the mountains to their west. The smoke was not on the far horizon, nor was it a scene on their television sets beaming in from some distant land. They could smell it. Fire was in the foothills of their city. And life was about to get very serious very quickly for the people who lived near those mountains.

On that Tuesday afternoon of June 26, 2012, as the thermometer hit an all-time high for Colorado Springs, the Waldo Canyon fire was gathering strength as it burned unchecked in the ponderosa pine, scrub oak, and sage covered hills on the outskirts of the city. The spokesperson for the National Forest Service had just finished her daily 4 p.m. news conference, stating that while the fire was not yet contained, it had been a good day on the fire lines and nothing surprising was expected. Suddenly the winds picked up, the result of thunderstorms 50 miles to the north that affected the local atmosphere of the Pikes Peak region. The hot wind gained strength and changed direction, gusting to 65 knots and driving the fire over the ridge and down the slopes on the west side of Colorado Springs—directly into an upscale neighborhood of residential homes known as Mountain Shadows. The fire jumped two containment lines as the firefighters in the foothills dropped their equipment, put their hands on the shoulders of their comrades so as not to lose them in the smoke, and marched single file out of the woods, regrouping down below along city streets that were already burning. Meanwhile, the city government quickly ordered the evacuation of 35,000 people who lived

in the path of the fire. In the false twilight of a city no longer recognizable in the heavy smoke, long lines of cars began heading out of the danger zone during the height of the evening rush hour. Interstate 25 was shut down in one direction so the evacuees could use all six lanes to get away—although where they were going, many had no idea. They had left the tangible manifestations of their lives behind as flames appeared in their rear view mirrors. And no one knew where or when this firestorm could be stopped.

Thus began a horrific night of burning houses, property triage, and valiant efforts by the combined forces of multiple local fire departments, plus the small number of Forest Service firefighters on the scene, to fight back against the flames. By the next morning, nearly 350 homes lay in ruins. The fire continued to burn north along the Front Range and threatened the US Air Force Academy, but the worst was over. Within days, the federal government had fully entered the fight, with nearly 1,600 firefighters on the lines and the entire national fleet of aerial firefighting aircraft involved. Colorado's governor called out the National Guard to help the city police protect the remaining homes in the ravaged neighborhoods. Private organizations opened shelters and began collecting donations to help their displaced neighbors. Even US Northern Command, which had not formally been asked for help till that point, found it impossible to sit on the sidelines when the fire was clearly visible from windows in the headquarters building on Peterson Air Force Base, just across town. Partly in response to public and media questions asking "Where is the military?" Northern Command activated the entire Military Airlift Firefighting System (MAFFS) fleet, consisting of 8 C-130 aircraft especially equipped to dump 16 tons of fire retardant in a single pass. Three days after the disastrous firestorm, while the fire was still devouring Pike National Forest, President Barack Obama made a trip to Colorado Springs to see the devastation and declare it a disaster area, opening the path to more federal support and relief funds.

As this episode showed, all emergencies and disasters begin as local events. When the episode is complete, and things once again settle down, they end as local problems of mitigation, cleanup, lessons-learned studies, and rebuilding. From the local perspective, federal resources often seem to arrive too late and leave too early. But in the past decade the United States has significantly improved its plans for dealing with terrorist attacks or natural disasters, including the creation of US Northern Command to handle military support to civil authorities when necessary, and the development of a national incident management system, with associated national level documents to support that plan.

Natural disasters are not the only concern for the US government when thinking about consequence management. While uncommon, terrorist events and accidents or incidents involving the materials or agents found in weapons of mass destruction (WMD) are certainly a viable threat, as seen in incidents as widespread as the Aum Shinrikyo attacks using sarin gas in the Tokyo subway, anthrax letters mailed to key media personalities and legislators in the United States, mass bombings of the Madrid and London transport systems,

and the threat of a radiological dispersal device in a Moscow park. With the global spread of technology and knowledge about these weapons and the ease of international travel, such threats are only going to increase. In addition, natural disasters such as Hurricane Katrina, which devastated New Orleans and the Gulf Coast in 2005, Hurricane Sandy in the northeastern United States in 2012, major blizzards that have hit the East Coast in recent years, spring tornado outbreaks that strike cities in the Midwest, and the annual onslaught of killer forest fires in the West will always be with us. As a result, we need government agencies and individuals that are not only prepared to deal with natural disasters and weather events, but who also understand WMD and what to do when an incident, accident, or natural disaster occurs. A WMD incident would have implications across the spectrum of communities found in modern society: medical, public health, policy, public affairs, and national security, among others. Cooperation is therefore necessary between the agencies in these arenas at all levels of local, state, and federal government. Local responders will be most crucial to managing the effects of such an incident, as well as the most vulnerable to the effects of the materials themselves. Law enforcement and military organizations are likely to be among those first responders. Many of the professionals in those organizations will pass through the DOD Joint Professional Military Education system, giving educators the opportunity to train and educate those groups prior to the next big surprise.

ABOUT THE PROJECT

The project that led to this book began as an effort to develop a reader on consequence management suitable for classroom use in the Joint Professional Military Education system. Such a book, the sponsors hoped, would highlight the challenges posed by WMD in executing consequence management operations, as well as other operations in the wake of catastrophic events. It would address the policy, organizational, and operational issues that confront local, state, and federal first responders and interagency members when they are faced with responding to a natural disaster or an incident involving chemical, biological, nuclear, radiological, or high explosive materials or weapons. Managing a WMD event requires cooperation and collaboration between multiple agencies across all layers of government, and possibly with foreign governments as well.

Such a volume would introduce students of consequence management to government plans and directives regarding WMD and consequence management, the National Incident Management System, the National Response Framework, the National Strategy to Combat WMD, the means employed to handle foreign consequence management, public affairs and media considerations, legal issues, homeland security, and US interagency considerations. There is a large body of literature available to the student of consequence management, from academically oriented, broad-based approaches such as Bruce Bennett and Richard Love's *Initiatives and Challenges in Consequence*