



Preface

Bioterrorism



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Guest Editors

Few events in American history have so traumatized and galvanized a nation as the events of September 11, 2001, and the subsequent acts of bioterrorism involving weaponized anthrax spores. Those of us who have been working in the field of defense against weapons of mass destruction had been deeply concerned about these threats and our vulnerabilities, even before those horrific attacks. Since Operation Desert Storm, this unease has evolved from a battlefield focus to include terrorist use of these weapons against our homeland. Many of us maintained the hope that the use of such weapons by even the most determined enemy was highly unlikely for a number of reasons. First, despite occasional media reports to the contrary, production of biological weapons that could produce massive casualties was considered beyond the capability of most terrorists unless they were well funded or had state sponsorship. Secondly, their use was considered so

heinous that only the most uncivilized adversary would even consider their deployment. Finally, any attack against the United States or its citizens would most assuredly have resulted in the most severe of retaliatory actions.

Unfortunately, the events of and since September 11th have shredded these hopes and perceptions. Our enemies appear determined to strike us in anyway that they can—regardless of the consequences. The behavior of anthrax spores released from sealed letters was also unexpected, and we realize now more than ever how much research and preparation needs to be accomplished in the areas of standoff detection, personal protection, laboratory analysis, decontamination, prophylaxis, treatment and finally education and training.

It is hoped that this collection of papers will serve as an essential resource for medical and public health professionals—including public health practitioners, epidemiologists, physicians, nurses, physician assistants, and other allied health care providers and emergency medical responders—who would seek to improve their ability to counter acts of biological terrorism. Much of what is contained herein may also be of value to governmental officials and non-medical emergency planners in understanding the complexities of bioterrorism preparedness and response. Mitigating disasters always requires an integrated horizontal and vertical approach involving diverse response elements. Unlike in most disasters, however, primary care and emergency providers will be the sentinels, and the health care community will serve as the vanguard, in the response to an attack using biological agents.

This issue of the *Emergency Medicine Clinics of North America* begins with a historical discussion of biological weapons and the evolution of the threat from the early nineteenth century to the present. Next we discuss the agents of bioterrorism. Although there are several ways to classify biological agents, we elected to review the Centers for Disease Control and Prevention's classification scheme according to their "Critical Biological Agents threat list—Categories A, B and C." Category A agents pose the greatest threat to our medical and public health systems and are therefore reviewed in some depth. Next we discuss the role of the laboratory and some of the unique medical management issues pertaining to bioterrorism. We include an interesting article that describes an algorithmic approach to managing suspected victims of bioterrorism. A separate chapter is devoted entirely to emergency mental health management. Most mental health professionals predict, and research supports, that psychological casualties will vastly outnumber those patients truly exposed to a biological weapon and may be difficult, if not impossible, to differentiate. The immediate and long-term psychological toll on the community and responders will also be severe. Deliberate planning will be necessary if we are to mount an effective response. Equally important, we must prospectively address the difficulties in the triage of thousands of patients. In his scholarly paper, Dr. Burkle argues that effective management of such an evolving disaster can only be achieved through the employment of principles and practices that are rela-

tively alien to the health care community. A series of articles explores the many operational issues in preparing for and responding to bioterrorism events in the emergency department and hospital, and at the local, state, and federal levels. We conclude with a discussion of the profound future challenges to our efforts to stay one step ahead of those who wish us harm.

These challenges are indeed great. Fortunately, we are blessed with strong leadership at the highest levels of government. With their guidance, the determined efforts of scientists, physicians, the emergency response community, and a people united, we will overcome this threat to our way of life. We as a nation have overcome more serious threats that would have surely caused lesser societies to fall. I am confident that with our determination, ingenuity and solidarity, America will conquer this challenge as well.

I express my thanks and gratitude to the contributing authors who provided the scholarly input into each of their well-written articles. I also thank my coeditors Dr. Joseph Waeckerle and Dr. Edward Eitzen, who provided valuable insight and editorial critique. Special thanks go to my coeditor and good friend Dr. Jerry Mothershead. Without his incredible work ethic, writing, and editorial acumen and his encyclopedic knowledge of the field of disaster medicine, this project would have taken many more months to complete and would have been of far lesser quality.

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