

Bioterrorism: Guidelines for Medical and Public Health Management. Donald A Henderson MD MPH, Thomas V Inglesby MD, and Tara O'Toole MD MPH, Editors. Chicago: American Medical Association. 2002. Soft cover, illustrated, 244 pages, \$29.95.

The anthrax attacks of 2001 brought to light the desperate and unfortunate need for all health care providers to be familiar with the clinical features and epidemiology of the agents of bioterrorism. Very few practitioners in the United States have seen or managed a case of inhalation anthrax, smallpox, pneumonic plague, or even botulism; yet we all have to be prepared to deal with these and other intentionally inflicted infectious diseases. **Bioterrorism: Guidelines for Medical and Public Health Management** provides up-to-date presentations on the agents most likely to be used in a bioterrorism event, as well as detailed clinical descriptions of the cases associated with the anthrax attacks in Miami, New York, and Washington DC in 2001.

The book is intended primarily for the busy clinician or public health official who must prepare for or respond to a potential bioterrorism event. It is a practical book in that it is concise, and yet it is also comprehensive enough to be a reference. All health care providers must be capable of sounding the alarm for a bioterrorism attack, and this book provides the basic knowledge to recognize the most likely bioterrorism diseases. For physicians who specialize in pulmonary and infectious diseases, the book describes concise management principles by way of updated consensus statements developed by the Working Group on Civilian Biodefense.

The editors, including Donald A Henderson of global smallpox-eradication fame, form the core of the Johns Hopkins Center for Civilian Biodefense and are the foremost experts in this burgeoning field. They initially addressed the growing threat of bioterrorism in a series of articles published in *JAMA* in 1998–2000. This book is a compilation of those articles, updated to include the data from the bioterrorist events of 2001.

Each updated article is a chapter in the book, and together they cover the 6 agents listed by the Centers for Disease Control as Class A, most likely to be used as bioweapons: anthrax, smallpox, plague, botulinum toxin, tularemia, and the collective hemorrhagic fever viruses. Each of these reports forms a consensus statement from an expert panel composed of military, civilian government, and civilian academic experts. The book wisely does not address some of the more esoteric agents, such as staphylococcal enterotoxin B or ricin, as these are thought less likely to be used as bioweapons, for various reasons.

The book is organized in a readable fashion. After a brief foreword by Anthony S Fauci, the first chapter introduces the topic of bioterrorism by explaining the need for this book and the general methods used in creating it. Fauci and H Clifford Lane then set the stage for the next chapters to describe in detail the bioterrorism anthrax of 2001. The cases of those who survived and those who died from inhalation anthrax are presented with concise clinical and laboratory data. Perhaps most useful are the radiology studies, which include standard chest radiographs and computed tomograms, as well as the management strategies employed in the care of those patients.

Next, Julie L Gerberding, the present director of the Centers for Disease Control, discusses the state of public health preparedness vis-à-vis bioterrorism in the United States. She highlights the need for a robust surveillance system, with emphasis on front-line clinicians, as they will be the first to identify a bioterrorism outbreak. The next 3 chapters discuss cases that demonstrate the need for that surveillance system, including the cases of fatal inhalation anthrax in 2 women who had no known risk factors for acquiring the disease. Although a risk factor was later elucidated, a case of cutaneous anthrax in an infant in New York City is also presented.

Following the case descriptions of the anthrax attacks of 2001, the editors placed the updated monographs on each of the 6 Class A bioterrorism agents. The first of these chapters discusses anthrax and is the longest chapter in the book. It is updated to include data

and recommendations learned from the anthrax attacks of 2001. This chapter addresses the clinical management of anthrax in adults, children, and pregnant patients, discusses anthrax immunization and post-exposure prophylaxis, and provides specific details for infection control and decontamination. It closes with a brief section on ongoing research.

The next chapter discusses one of the scourges of humankind: smallpox. Though it was eradicated from the world by a concerted worldwide effort, this killer of millions must be considered a potential bioterrorism agent. The chapter describes the clinical and epidemiological features of smallpox and includes photographs of the progression of the disease as well as a good discussion on the time-honored treatment of post-exposure vaccination with vaccinia virus and potential new therapies like cidofovir. The administration and complications of the smallpox vaccine are discussed, as are infection control, decontamination, and future research. This chapter has been updated since the original publication in *JAMA*, but it does not cover the current controversy regarding pre-exposure vaccination in the United States.

The following chapters cover the other 4 Class A bioweapons. These agents are considered somewhat less likely to be used as bioweapons, but have been weaponized by several nations in the past. All these agents still exist as naturally occurring diseases, so care must be taken in determining if a case represents a bioterrorism event. Obviously, the epidemiology will often declare the nature of a case or cluster of cases; for instance, Lassa fever is not a naturally occurring disease in someone who has not traveled outside the United States. These chapters provide excellent discussions on plague, botulinum toxin, tularemia, and the viral hemorrhagic fever agents. They cover the epidemiology and clinical features of each of these agents, and also address the treatment, infection control, decontamination, and future research for each agent.

The final chapter discusses some of the legal challenges regarding the public health response to a bioterrorism event. This mainly concerns involuntary confinement for quar-

antine, which may become a contentious issue.

I have only a few criticisms of this book. As with any text concerning a rapidly evolving field, some of the ideas on management have now progressed beyond what is covered in the book. Issues that are not up to date in this book include the role of anthrax vaccine in post-exposure prophylaxis and the role of smallpox vaccination in pre-exposure cohorts such as health care workers. Additionally, a description of the efforts at the United States Capitol to prevent anthrax cases would have provided the only published insights into that unfortunate event. Finally, as any bioterrorism event is designed to cause fear, a chapter addressing the psychological management of such an event would be germane and should be included in any future texts on this subject.

This book is published as a soft-cover edition, with a microscope photo of anthrax on the cover. The book is generally organized in a clear and logical manner. There are very few typographical errors, and the text is generally very readable. The copy I received had several pages that were blurred to varying degrees (pages 145, 153, 156, 161, 164), one of which was barely readable. The clinical, microscopic, and radiographic photographs were all of high quality, and the tables are easily readable and concise. The references were appropriate and well documented, and the authors are leaders in their respective fields.

Overall, I think this book provides a concise and readable summary of the important aspects of bioterrorism and would fit well into the library of any physician, public health official, nurse, or respiratory therapist interested in this growing field.

David L Blazes MD MPH*
Infectious Diseases Department
National Naval Medical Center
Uniformed Services University of the
Health Sciences
Bethesda, Maryland

Comprehensive Management of Chronic Obstructive Pulmonary Disease. Jean Bourbeau MD MSc, Diane Nault RN MSc, and Elizabeth Boyrcki RN HBScN, MN, GNC(c). Hamilton, Ontario: BC Decker. 2002. Soft cover, illustrated, 372 pages, with CD-ROM, \$59.95

Comprehensive Management of Chronic Obstructive Pulmonary Disease is a new text from an impressive multidisciplinary collaboration of authors working in Canada. It is intended to reach a diverse audience of health professionals involved in COPD management and is based on the belief that a team approach delivers the best possible quality of care. Furthermore, the authors consider the patient the central member of this team. The editors express the innovative, admirable aim of going beyond the traditional topics covered in COPD texts, such as lung function and pharmacotherapy, to include those areas less familiar but arguably just as important to the patient: psychosocial issues, travel, leisure, and sexual function, for example.

Each chapter begins with clearly stated objectives and concludes with a summary, illustrative case history, and bulleted key points. There are also practical suggestions of when to refer to an appropriate specialist from the multidisciplinary team. The book is extensively referenced and comprehensively indexed. Each chapter also includes a list of suggested extra reading, with useful, brief descriptions of why the items might interest the reader. Text, tables, figures, and photographs are clear but black-and-white throughout. The book includes a CD-ROM that contains the full text and illustrations, in PDF (portable document format), but no additional features.

The first 3 chapters concern the epidemiology, basic pathogenesis, and clinical features of COPD, presenting a rather bleak outline of the impact of this disease on the patient, the patient's family, and society. The rationale in moving from a reactive, crisis-oriented model of care to a planned, longer-term approach is discussed in depth, since this strategy forms the basis of the remaining chapters.

The only 2 interventions that have shown a survival benefit in COPD (smoking cessation and long-term oxygen therapy) are dealt with in subsequent, separate chapters. These are also sections on the pharmacotherapy of stable COPD, with equal emphasis on the important topic of drug *delivery*,

not merely the drugs themselves. The text is commendably up to date, including, for example, new classes of drug, such as the long-acting anticholinergics. However, readers will find no reference to oxitropium, presumably because that drug is not marketed in Canada. The chapter contains a thoughtful summary on the still controversial role of inhaled corticosteroids in stable COPD. A particularly useful and detailed section aids the teaching of inhaler technique to patients and includes all the currently available types of drug delivery systems.

As a physician and a research fellow investigating exacerbations of COPD, I was particularly interested to read Chapter 8, "Managing Acute Exacerbation." The authors provide a clear, concise, and readable summary of current thought on this topic. Respiratory viruses are increasingly being recognized as the most important cause of COPD exacerbation, but this point was not made specifically. This is a minor criticism. In-hospital treatment strategy is not covered. The important topic of self-management is discussed in detail, and an example self-management plan is included as an appendix. Though there is a large body of literature in support of such an approach for asthma, surprisingly little work has been pursued regarding COPD. Here the authors refer to their own data, presented in abstract form, in support of their arguments.

Chapter 9 considers the management of dyspnea and cough, which are the 2 most troublesome and difficult symptoms. A lucid account of the pathophysiology, including more difficult concepts such as dynamic hyperinflation, precedes a discussion of both pharmacologic and nonpharmacologic treatment options. Fatigue and approaches to energy conservation are covered in Chapter 10. Building from there, Chapter 11 provides a detailed review of exercise training in the context of pulmonary rehabilitation. This section comprehensively covers the concepts of different types of exercise, providing a rationale for the in-depth description, enhanced by figures, of appropriate exercise techniques. Psychosocial factors, affecting both patient and family, are the subject of Chapter 12. The important interplay of psychological morbidity and physical functioning is discussed, including methods of assessment and treatment for the commonly encountered problems of anxiety and depression in these patients.

Other aspects that can profoundly affect quality of life including nutrition, sleep, sex-

*The views expressed in this review are those of the author only and are not the official views of the Department of the Navy or the Department of Defense. This review is not subject to copyright protection.