with tables listing clinical syndromes (e.g., cellulitis, pneumonia, gastroenteritis) and their possible infectious causes. The lists of etiologic agents are extensive, yet practical, and would be of most benefit to infection control practitioners, nurses, and laboratory technologists. Section 3 is devoted to therapeutic choices for various microorganisms and is intended to inform laboratorians of treatment options; it is not a guide for therapeutic decision-making by clinicians. Although certain taxonomic classifications and susceptibility guidelines do not reflect the current standard, most information, such as annotated remarks for pathogens classified as select agents, is timely.

The author valiantly furnishes us with pearls and nuances of clinical microbiology in this clear and concisely written handbook. The task was Herculean. As the author aptly notes in the introduction, no handbook can capture every parameter or indication for identification of all clinically relevant microorganisms and describe these microorganisms in public health or patient-centered contexts. Overall, the author delivers a wealth of information that can benefit technologists and healthcare practitioners in regions with limited access to professionals who specialize in clinical microbiology or infectious diseases.

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# Bioviolence: Preventing Biological Terror and Crime

**Barry Kellman** 

Cambridge University Press, Cambridge, United Kingdom, 2007

ISBN-10: 0521709695, ISBN-013: 978-0521709699

Pages: 392; Price US \$28.99

Even before the anthrax attacks in 2001, public health agencies and partner sectors had begun intensifying efforts to detect and respond to the specter of biologic agents used as instruments of terror. The events in 2001 highlighted the substantial preparedness gaps and needs in multiple dimensions, particularly the requirements for coordinating the work of public health and law enforcement, sectors that operate under different jurisdictional configurations and legal regimes. This book is written by a law professor who begins by positing the thesis that humanity is vulnerable to bioterrorism because current international legal regimes are inadequate to support preventive policies. The author may thus be overly ambitious by attempting to cover this topic on a global scale, rather than through the prism of 1 or a few governance systems.

This book may be particularly helpful to persons who want to learn more about basic concepts regarding the methods of bioterrorism. For example, the second chapter provides an overview and description of biologic agents identified as candidates for use by terrorists, and the third chapter presents a synopsis of historical milestones in the use of bioweapons. The second part of the book offers a conceptual treatment of the author's beliefs about factors accounting for the global failure to effectively confront the threat of biologic agents by multiple actors, and combines this

with a focused discussion of 4 categories of measures to reduce bioterrorism. These categories are interdiction (a practically framed summary), denial of access to methods of bioterrorism, preparedness (i.e., detection and response), and nonproliferation regimens. The author concludes with a call for the establishment of "a global governance architecture for preventing bioviolence."

The book's utility for practical applications seems constrained, in part, by a limitation common to single-authored books on topics with myriad and complex technical dimensions. In particular, examining bioterrorism must take into account the convergence of numerous and complex fields, including forensic and laboratory sciences, public health, law enforcement, and behavioral sciences, to name only a few. In addition, although some chapters provide information helpful for shaping readers' understanding of particular issues, in many instances the text falls short of being practically relevant. For example, within the chapter on public health preparedness, the author devotes only 3 paragraphs to the critically important issue of "law enforcement-public health cooperation," which, since the 2001 anthrax attacks, has been the focus of several major initiatives within the United States.

An additional point is that the author appears to be coining a new term, bioviolence ("...the infliction of harm by the intentional manipulation of living micro-organisms or their natural products for hostile purposes"), for which he also provides a rationale. Yet to be determined is whether this term truly is helpful or possibly confusing because of the already well-established lexicon and conceptions surrounding bioterrorism. On balance, however, this book can be recommended because it helps to address a void in the literature, particularly in relation to concepts of preventing bioterrorism, and because it represents another step toward establishing the multidimensional knowledge base necessary to enhance preparedness.

## Richard A. Goodman\*

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# Encyclopedia of Infectious Diseases: Modern Methodologies

Michel Tibayrenc, editor

Wiley & Sons, Inc., Hoboken, New Jersey, USA, 2007

ISBN: 978-0-471-65732-3 Pages: 747; Price: US \$175.00

Michel Tibayrenc is someone with big ideas. For many years, he has championed a vision of multidisciplinary systems to approach infectious diseases and public health. One of his longstanding ideas has been to develop a global network of regional institutions built on the model of the US Centers for Disease Control and Prevention. To address routine and emerging disease challenges, this network would blend state-of-the-art molecular approaches such as evolutionary genetics, proteomics, sequencing, and subtyping with traditional field investigations and surveillance.

In support of this vision, Dr. Tibayrenc has edited a book entitled Encyclopedia of Infectious Diseases: Modern Methodologies. The dictionary defines an encyclopedia as "a

work that contains information on all branches of knowledge or treats comprehensively a particular branch of knowledge, in articles usually arranged alphabetically by subject" (1). When asked to review the book, I was therefore curious as to how he would cover such a broad topic.

Despite its lengthy 747 pages, this book is not an encyclopedia of infectious diseases. First, the content has no obvious pattern, alphabetical or otherwise. As an example, the opening chapter is "Pulmonary Tuberculosis and Mycobacterium tuberculosis: Modern Molecular Epidemiology and Perspectives." Four chapters later, a somewhat redundant chapter called "Molecular or Immunological Tools for Efficient Control of Tuberculosis" appears. In between are unrelated chapters on livestock diseases, HIV/ AIDS molecular epidemiology, and uncultured pathogens; these are followed by chapters on leishmaniasis and epidemics of plant diseases.

Second, the book is hardly comprehensive or consistent. It contains full chapters on leishmaniasis, severe acute respiratory syndrome, cholera, hantavirus infection, and Chagas disease, and 2 chapters each on tuberculosis and malaria. Some of these chapters are relatively straightforward reviews; others use the disease for illustrative purposes only. The chapter on livestock diseases has 18 references; the one on leishmaniasis, 402. An important pathogen like Staphylococcus aureus is virtually unmentioned; Streptococcus pneumoniae does not even appear in the index.

So if the book isn't an encyclopedia, what is it? The best description would be an interesting potpourri of essays on various aspects of infectious diseases. One chapter is even entitled, "Topical Debates." Although the emphasis is on pathogen differentiation and evolution, the content runs the gamut from mathematical modeling to geographic information systems to remote sensing to morphometrics. The

book even contains a fascinating chapter devoted to archeological epidemiology (mummies) and a whopping 61-page chapter on infectious diseases and the arts, including an extensive list of movies with infectious disease themes.

This assessment by no means trivializes the book. Many of its chapters are extremely well written and do a wonderful job of distilling complex concepts into narrative that even a novice infectious disease scholar could understand. Particularly fine examples are the chapters on influenza evolution and on geographic information systems.

So who would benefit from this book? Not those engaged in clinical medicine and those looking for a practical encyclopedia of infectious diseases; they will be disappointed. This book is fundamentally a loving and personal testament to Dr. Tibayrenc's vision of multisystems approaches to emerging diseases. Those who share this vision will find a great deal to value in this text.

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## Reference

 Merriam-Webster's ninth new collegiate dictionary. Springfield (MA): Merriam-Webster, Incorporated; 1989. p. 410.

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### Books, Other Media.

Reviews (250–500 words) of new books or other media on emerging disease issues are welcome. Name, publisher, number of pages, other pertinent details should be included.