

Reviews and Resources

BOOK

Public Health and Infectious Diseases

D. Hamer, J. K. Griffiths, J. H. Maguire, H. K. Heggenhougen, and S. R. Quah (ed.). Academic Press, San Diego, Calif., 2010, 512 p., \$99.95 (hardcover).

Public Health and Infectious Diseases is about infectious diseases and their link to public health. It is a comprehensive compilation and discussion of clinical and research data that can be used by many public health and biomedical professionals, including clinicians, epidemiologists, and infectious disease research scientists, as well as faculty and students. Hamer and Griffiths provide in the introductory chapter a historical review about infectious diseases and their role in the 21st century. They identify the most important neglected infectious diseases and those that are emerging, and discuss the important role of zoonotic reservoirs. The authors point out that despite the many significant advances made in diagnosing and treating infectious diseases, they still remain a major cause of morbidity, disability, and mortality.

Public Health and Infectious Diseases is written by 96 authors from respected institutions around the world. The editors divided the book into four main sections: The first section provides an overview about infectious diseases and associated syndromes. The following sections review the role of selected infectious agents and resulting diseases that “form the bulk of human burden.” These include bacterial and rickettsial diseases (Section 2), parasitic illnesses (Section 3), and viral diseases (Section 4). The following paragraphs pro-

vide more detailed information about the content of these sections.

Section 1 (Overview and Syndrome Chapters) covers topics related to bacterial infections (e.g., microbiology, epidemiology, clinical manifestations, diagnostics, and antibiotic treatment), childhood infectious diseases (types and magnitude, implications for public health, etc.), and intestinal infections (e.g., distribution, clinical picture, pathophysiology, diagnosis, and therapy). There are also chapters on foodborne and waterborne infectious diseases, which summarize information on causes and burden, as well as prevention and control. Finally, there is a chapter on pneumonia (bacterial and viral) and on hepatitis (types A-E). These chapters are excellent primers for the reader in order to fully understand all subsequent information.

In the second section (Bacteria and Rickettsia), the authors discuss botulism, tetanus, diphtheria, brucellosis, and cholera, shigellosis, typhoid fever, leprosy, and syphilis, and also diseases caused by *E. coli*, *Salmonella*, *H. pylori*, *Rickettsia*, *Streptococcus*, and *Chlamydia*. Specific information is provided on the etiologic agents, the clinical features, the laboratory diagnosis, the treatment regimens, and issues of prevention and control.

Section 3 (Parasites) begins with an introduction to parasitic diseases, followed by a discussion about the role and functioning of ectoparasites and arthropod vectors. The subsequent chapters are divided into protozoan diseases and helminthic diseases. More specifically, the authors review illnesses caused by protozoans such as *Ameba*, *Cryptosporidium*, *Giardia*, *Trypanosoma*, *Plasmodium*, *Leishmania*, and *Toxoplasma*. On the helminthic side, diseases caused by *Ascaris*, *Trichuris*, *Ancylostoma*, *Wuchere-*

ria, *Onchocerca*, *Trichinella*, *Taenia*, *Echinococcus*, and *Shistosoma* are discussed, among many others.

Finally, Section 4 (Viruses) deals with viral diseases such as influenza (seasonal and pandemic), measles, mumps, rubella, rabies, herpes, and poliomyelitis, as well as dengue hemorrhagic fever and yellow fever. There is also information provided about infectious diseases caused by arboviruses, rhinoviruses, and the respiratory syncytial virus.

Readers of this book will notice that diseases such as AIDS, tuberculosis, smallpox, and dracunculiasis, as well as fungal illnesses, have not been given significant attention. The reason is that the editors wanted to fill a gap in information about important infectious diseases that occur in areas of the world where people have little resources and where these diseases have received insufficient attention in recent years. If readers are interested in learning more about these lesser-discussed diseases, he/she should consult additional information resources.

In conclusion, this is a fine book; it is very well prepared and, I believe, well positioned on the science book market in the areas “microbiology,” “infectious diseases,” and “public health.” One suggestion I have for the preparation of future editions of this book is to use for clarity color photographs for the illustration of disease manifestations, stained histological sections, pie charts, line graphs, and geographic distribution maps. Overall, I’ll be happy to recommend this book to anyone who has an interest in studying the link between infectious diseases and public health.

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