Riley, L. W.

Molecular Epidemiology of Infectious Diseases. Principles and Practices

AMS Press, American Society for Microbiology: Washington, DC, 2004. XV + 348 pages. Format 180 × 255 mm. Binding: Hardcover. Price: USD 109.95. ISBN 1-55581-268-6

The author is affiliated with the School of Public Health, University of California, Berkeley. He emphasizes in the preface that this book is designed to provide a background and practices of epidemiology that take advantage of new molecular biology tools to solve infectious disease problems. The main goal of this book is to introduce interested epidemiologists to the standard vocabulary of molecular biology, interested molecular biologists to the basic concepts of epidemiology, and interested clinicians to the vocabulary and concepts of both disciplines.

The volume is composed of 12 sections subdivided into chapters and subchapters. Section 1 is intended to give the introduction to principles and approaches while discussing differentiating molecular epidemiology from taxonomy and phylogeny, and application to epidemiology of molecular strain-typing methods. Sections 2 and 3 focus on laboratory methods used for strain typing of pathogens: conventional and molecular techniques and PCR-based strain typing methods. Sections 4 through 6 are devoted to the analysis of similarity and relatedness in molecular epidemiology, to distinguishing epidemic and endemic occurrence in infectious diseases, and to stratification and refinement of data in epidemiologic investigations. Subsequent sections 7 through 9 comprise distinguishing

pathovars from nonpathovars in *Escherichia coli*, *Streptococcus pneumoniae* and *Helicobacter pylori*. Sections 10 and 11 analyse clinical and epidemiologic issues related to nosocomial infections caused by *Staphylococcus aureus* and gram-negative bacteria. Final chapter 12 includes identifying a pathogen's biologic determinants of disease transmission. In conclusion, there are a glossary and annotated websites of databases useful for molecular epidemiologic investigations.

Molecular Epidemiology of Infectious Diseases provides a state-of-the-art review of molecular epidemiology, using real-world examples that clearly illustrate basic concepts. While emphasis is placed on bacterial infectious diseases as the discussion model, ideas presented are generally applicable to other categories of infectious diseases. The glossary of terms propagates the language of molecular epidemiology and will foster improved communication and idea exchange among epidemiologists, microbiologists, and clinicians. This book is mainly intended for the health care professionals, researchers and practitioners working with infectious diseases, and students in medical schools interested in infectious diseases and epidemiology.

Jindřich Jíra

Schlossberg, D., editor Infections of Leisure

Third Edition. AMS Press, American Society for Microbiology: Washington, DC, 2004. XIII + 444 pages. Format 180 × 253 mm. Binding: Paperback. Price: USD 59.95. ISBN 1-55581-299-6

The editor is affiliated with Temple University School of Medicine and with Jefferson Medical College of Thomas Jefferson University, Philadelphia, Pennsylvania. The list of contributors comprises 27 specialists mostly in the field of infectious and internal medicine, comparative, geographic and travel medicine, medical microbiology and zoonoses, and population health. As stated in the preface, this edition continues to identify and organize the infectious risks associated with our leisure activities. As a by-product of our prosperity, more time is available to travel, swim, camp, hike, garden, and taste exotic foods. We continue to pamper our (sometimes unusual) pets and to play increasingly challenging sports. However, all these activities expose us to an expanding list of pathogenic microbes, some of which are entirely new and others of which are resistant to current therapy.

The volume is arranged in 16 chapters. Two introductory chapters provide insights into health problems associated with sea and freshwater, namely with fish and shellfish intoxications and poisoning, pathogenic vibrios, invertebrate and vertebrate

envenomations, hepatitis and other viral infections, furthermore with infections acquired in nonmarine environments (lakes, rivers etc.): diverse skin and soft tissue infections, ocular infections, urinary and pulmonary tracts infections, disseminated and central nervous infections. Chapter on the camper's uninvited guests, nominally venturing into wilderness, may be associated with diseases transmitted by ticks. Infections in the garden implicate many fungal, bacterial, viral and parasitic affections. Chapters 5 through 10 encompass pathogens which may be transmitted from animals to human beings from dogs, cats, birds, less common house pets, and rats. In subsequent chapters attention is given to exotic and trendy cuisine, transmission of infectious diseases during sporting activities, and travelling abroad. Concluding chapters encompass sexually transmitted diseases and travel ("from budoir to bordello"), infections from body piercing and tatoos, and infectious diseases at high altitude. Textual parts are supplemented with a list of topical references in each chapter. Moreover, there are tabular overviews and black-and-white illustrations of some dangerous animals and skin and ocular lesions.

Infections of leisure presents a most informative and very accessible companion volume to conventional textbooks of medical microbiology, parasitology, epidemiology, infectious diseases and

travel medicine. It provides a valuable overview for professionals taking health care of travellers, as well as an indispensable guide for travel agencies.

Jindřich Jíra

WHO STATEMENT

Geneva – The World Health Organization (WHO) welcomes the pandemic influenza response modelling papers published in the journals Science and Nature. This is work done by expert scientists using two different sets of assumptions. The models provide additional information which will help WHO and public health officials in our Member States to improve pandemic influenza preparedness planning.

Both papers suggest that a combination of early, targeted use of antiviral medicines and social distancing (measures such as cancelling mass gatherings and closing schools) can stop a pandemic, or at least slow its spread. There would be significant practical challenges to implementing such measures, but the enormous social trauma and human suffering that an influenza pandemic could inflict creates an obligation to thoroughly explore all proposals to limit this damage.

Several countries have already purchased stockpiles of antiviral drugs and WHO has taken steps to establish an international stockpile. National and international stockpiles of antiviral drugs may be an essential component of comprehensive international

pandemic preparedness, that also includes vaccine development and disease surveillance.

If we have a chance to reduce the scale of a pandemic with antivirals and other public health measures, the success of these interventions will depend on effective disease surveillance and early reporting in risk-prone countries. Before any stockpile can be used effectively, both must be strengthened.

For further information please contact: Mr Dick Thompson, Communications Officer, WHO, Tel: +41 22 791 2684, mobile: +41 79 475 5475, email: thompsond@who.int. All WHO Media Releases, Fact Sheets and Features as well as other information on this subject can be obtained on Internet on the WHO home page: http://www.who.int/.

Statement WHO/8 3 August 2005