

EMERGING INFECTIOUS DISEASES

Your Letters to the Editor

Letters commenting on recent articles as well as letters reporting cases, outbreaks, or original research are welcome.



Letters commenting on articles are more likely to be published if submitted within 4 weeks of the original article's publication. These letters should contain no more than 300 words and 5 references.

Letters reporting cases, outbreaks, or original research should contain no more than 800 words and 10 references. They may have one Figure or Table and should not be divided into sections.

All letters should contain material not previously published and include a word count. Letters will be published at the discretion of the editors and subject to editing and abridgment. Submit letters to <http://eid.manuscriptcentral.com/>



A Clinician's Dictionary of Pathogenic Microorganisms

James H. Jorgensen and Michael A. Pfaller, authors

ASM Press, Washington, DC
 ISBN: 1-55581-280-5
 Pages: 273, Price: US \$29.95

This dictionary of pathogenic microorganisms, published by the American Society for Microbiology, is simple and useful. This book is divided in four sections, bacteria, fungi, parasites, and viruses. Each organism is presented alphabetically in its section. Older names are mentioned and connected with current names. A brief bibliography is also provided at the end of each chapter.

The emergence of new infectious agents in the last 2 decades makes it difficult for clinicians to recognize new diseases and new names. A memorandum to address this matter would have been useful. Moreover, the genomic revolution has caused a taxonomic revolution; this is specifically true for bacteriology. For example, 16S rRNA sequencing allowed reclassification of many pathogenic organisms and descriptions of many others. These advances in genomic knowledge have brought about many changes in the names of pathogenic microorganisms, evidenced here by the authors devoting the largest part of the book to bacteria.

The information provided, although very brief, is usually complete enough to provide a basic understanding of the microorganism. Many new organisms such as *Ehrlichia* and monkeypox viruses, as well as emerging diseases such as severe acute respiratory syndrome, are included.

This book provides basic information clinicians need for a quick refer-

ence book. It largely succeeds in this attempt and may be very useful as a pocket book for nonspecialists at the patient's bedside. I recommend it for general practitioners and health professionals.

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Cryptosporidium: from Molecules to Disease

R.C. Andrew Thomson, Anthony Armson, and Una M. Ryan, editors

Elsevier, Amsterdam
 ISBN: 444-51351-5
 Pages: 422, Price US \$139.00

The protozoan parasite, *Cryptosporidium*, has recently emerged as a human pathogen. It was unidentified or unrecognized as a cause of illness in humans until 1976. Since then, it has caused gastrointestinal illness around the world. Its small size, low infectious dose, resistance to chlorination, and durability in the environment has made it a uniquely challenging organism for environmental scientists and public health professionals.

This book includes full text of abstracts and invited papers from an international conference held in Australia in October 2001. More than 100 scientists from more than 15 countries contributed to the conference.

The "from molecules" aspect of the book, which addresses molecular and

biochemical features of the life cycle, infection, and detection of *Cryptosporidium*, gives a complete picture with detailed papers and abstracts of subjects, including pathogenesis and immune response, cell culture methods, detection methods, and molecular taxonomy. The main focus of the book is on descriptions and evaluations of traditional and novel methods to detect and differentiate *Cryptosporidium*. Papers are also included that describe methods of detecting *Cryptosporidium* in environmental water samples, detail surveys that determine the occurrence of *Cryptosporidium* in water supplies, and explain how to acquire laboratory accreditation for testing water samples.

The book focuses less on understanding the public health aspects of *Cryptosporidium*, its epidemiology, and treatment for the illness it causes. Notably absent are descriptions of serologic assays used for detecting *Cryptosporidium* in surveillance and epidemiologic studies. Recent studies have identified a high seroprevalence in the general population, which indicates that infection may be widespread (1–5). Including examples of quantitative microbial risk assessments would have been useful (6). These assessments are logical extensions of the valuable human infectivity studies described in several papers in the book. The treatment portion presents interesting results of randomized trials of nitroaxanide therapy but is otherwise limited.

The organization and grouping of the papers and abstracts were confusing. An introduction and summary for each section to help the reader identify and assimilate the information in an organized manner would have been helpful.

Despite these shortcomings, this book assembles and summarizes an impressive array of recent advances in *Cryptosporidium* research. I recommend this book for laboratory scientists, microbiologists, laboratory

technicians, and water-quality professionals. Medical professionals involved with research to detect and differentiate *Cryptosporidium* will likely find this book useful. Because of the technical nature of the papers and the emphasis on microbiologic methods, the book will be less useful for public health professionals, risk managers, and epidemiologists. Because of the rapid progress of *Cryptosporidium* research, I recommend using this book as one reference but also conducting a broad search of current literature for new studies or additional advances.

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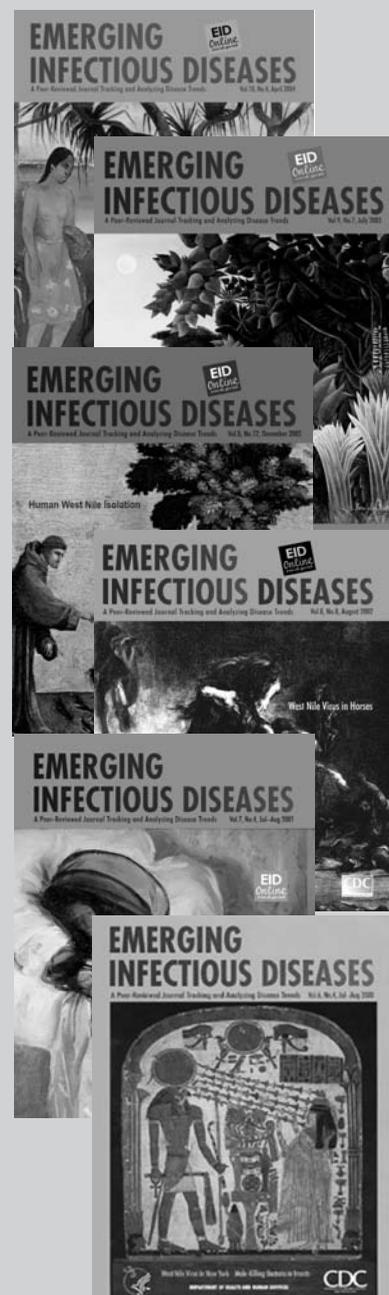
References

1. Leach CT, Koo FC, Kuhls TL, Hilsenbeck SG, Jenson HB. Prevalence of *Cryptosporidium parvum* infection in children along the Texas-Mexico border and associated risk factors. *Am J Trop Med Hyg.* 2000;62:656–61.
2. Eisenberg JN, Priest JW, Lammie PJ, Colford JM Jr. The serologic response to *Cryptosporidium* in HIV-infected persons: implications for epidemiologic research. *Emerg Infect Dis.* 2001;7:1004–9.
3. Frost FJ, Muller TB, Craun GF, Lockwood WB, Calderon RL. Serological evidence of endemic waterborne *Cryptosporidium* infections. *Ann Epidemiol.* 2002;12:222–7.
4. Frost FJ, Kunde TR, Muller TB, Craun GF, Katz LM, Hibbard AJ, et al. Serological responses to *Cryptosporidium* antigens among users of surface- vs. ground-water sources. *Epidemiol Infect.* 2003;131:1131–8.
5. Steinberg EB, Mendoza CE, Glass R, Arana B, Lopez MB, Mejia M, et al. Prevalence of infection with waterborne pathogens: a seroepidemiologic study in children 6–36 months old in San Juan Sacatepequez, Guatemala. *Am J Trop Med Hyg.* 2004;70:83–8.
6. Haas CN. Epidemiology, microbiology, and risk assessment of waterborne pathogens including *Cryptosporidium*. *J Food Prot.* 2000;63:827–31.

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Past Issues on West Nile Virus



www.cdc.gov/eid

by Guadalupe Ortega-Pierres, Simone M. Cacci², Ronald Fayer, Theo G. Mank, Huw V. Smith, R.C. Andrew Thompson February 2009
Giardia and Cryptosporidium are both. Chapters discuss topics from taxonomy, nomenclature and evolution to molecular epidemiology, advances in diagnostics and zoonotic, human and animal health issues. [divider style="normal" top="1" bottom="1"]. PDF 4.8 MB Password: vetbooks.ir Help. Save for Later Save Cryptosporidium: From Molecules to Disease For Later. Create a List. Download to App. Share. Book Information. Cryptosporidium: From Molecules to Disease. By Elsevier Science. Length: 345 pages 10 hours. Description. In recent years, the application of molecular biology and culture techniques have had an enormous impact on our understanding of the aetiological agents of cryptosporidial infections and our ability to study the causative agents in the laboratory. As a consequence, a wealth of information and novel data has been produced during the last 3-4 years, particularly in the areas of taxonomy, biology, pathogenesis, epidemiology - particularly zoonotic and water borne transmission, and treatment. Cryptosporidiosis - Aetiology, Infectivity and Pathogenesis. Cryptosporidium: they probably taste like chicken (S.J. Upton). Cryptosporidium: from molecules to disease (R. Fayer). Cryptosporidium parvum: infectivity, pathogenesis and the host-parasite relationship (C.L. Chappell, P.C. Okhuysen et al.). What is the clinical and zoonotic significance of cryptosporidiosis in domestic animals and wildlife (M.E. Olson, B.J. Ralston et al.). Cryptosporidium is one of the causes of diarrhoeal illness in man and animals worldwide. The aim of the study was to determine the prevalence and risk factors associated with faecal shedding of Cryptosporidium oocysts in dogs in FCT Abuja, Nigeria. A total of 276 dog faecal samples were examined using Modified Acid Fast (MAF) technique and Enzyme Linked Immunosorbent Assay (ELISA). To identify the genotype and subtype distributions of Cryptosporidium oocysts in domestic wastewater in Shanghai, China, and to facilitate the characterization of the endemic transmission of cryptosporidiosis, raw domestic wastewater samples were collected from four wastewater treatment plants in Shanghai, China, from December 2006 to April 2007. Cryptosporidium is a microscopic parasite that causes the diarrheal disease cryptosporidiosis. Both the parasite and the disease are commonly known as "Crypto". There are many species of Cryptosporidium that infect animals, some of which also infect humans. The parasite is protected by an outer shell that allows it to survive outside the body for long periods of time and makes it very tolerant to chlorine disinfection. While this parasite can be spread in several different ways, water (drinking water and recreational water) is the most common way to spread the parasite. Cryptosporidium is a le