

knowledge on pleural diseases. Not to be overloaded by the increased number of references, and keeping the interests of the busy physician in mind, the authors for each chapter have made appropriate annotations that inform readers on key papers and review articles.

Though a well written and thorough review, this textbook does have some minor limitations. This book is meant for physicians and basic researchers interested in pleural diseases. While the vast information may stimulate interest in reading for nurses and therapists, it may be beyond their scope of clinical application. Also, while there is a chapter on pediatric pleural diseases, the textbook focuses primarily on adult practice. The cost of the textbook (\$198.50) may limit its addition to many personal libraries, but for those interested in pleural diseases, this will be worthwhile addition. In summary, this is a great textbook for any pulmonologist, internist, and medical professional who has a keen interest in pleural diseases. This is a textbook that will definitely be on my library book shelf as a reference text.

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**Jeff May's Healthy Home Tips: A Workbook for Detecting, Diagnosing, & Eliminating Pesky Pests, Stinky Stenches, Musty Mold, and Other Aggravating Home Problems.** Jeffrey C May and Connie L May. Baltimore: Johns Hopkins University Press. 2008. Soft cover, illustrated, 200 pages, \$16.95.

As part of their continuous vigilance against allergen exposure, atopic individuals and asthmatics routinely need to control environmental triggers in their homes. This is a workbook-style compendium of "do's and don't's," case studies, recommendations, and resources to improve home indoor air quality, for people with and without environmental sensitivities. The book is arranged in a popular, easy-to-read, guide format similar to the "... For Dummies" series, in which the text is rich with boxed hints, tips, anecdotes, and reminders. There are also plenty of lists of questions and lined

spaces for the reader to respond to and list problems specific to his or her situation. The workbook format is apparently designed to induce reader involvement; however, without a classroom, workgroup, or other interactive context that provides feedback, I question the utility of this format. Further, I think the book would have been more useful with a spiral binding that would allow it to lie flat; the standard hard-spine paperback construction makes it harder to enter handwritten text.

The book is divided into 2 parts: "Mold, Mildew, and You" (105 pages) and "Problems Other Than Mold" (66 pages). The chapter "Mold: Inside, and Out" covers water and mold issues, and provides do's and don't's about a dwelling's susceptible locations. The chapter discusses floods, garages, heating and cooling systems, things to watch for when considering buying a house or automobile or staying at a hotel, and how to deal with a home's exterior, especially factors that slow or prevent rain-shedding. There is a long list of helpful hints, some of the more constructive of which include keeping basements and crawl-spaces within the building's conditioned space, the use of barrier systems, and the use of hygienic methods when removing moldy and water-damaged materials. One recommendation I questioned was that environmentally sensitive people should always test fiberglass insulation within a crawlspace. I am not clear why they make that recommendation; such tests can be difficult to interpret and may cause unnecessary occupant anxiety.

The chapter "Confirmation and Remediation" covers testing for mold, the decision on whether to clean up the mold yourself or to hire a professional remediation firm. One of the most useful pieces of advice is on the questionable value and validity of mold air sampling. The Mays agree with the emerging professional consensus that air sampling for mold is unnecessary in most cases, and they discuss ways to ensure that mold remediators are well-qualified and cognizant of industry standards.

In the chapter "What and Where?" the Mays explore means to solve a wide range of contaminant-producing problems. They begin with rooms that have piped-in water, and provide diagrams (eg, how a toilet operates), and ways to prevent indoor air quality problems from these moisture-generating spaces, such as making sure the dryer exhausts completely to the outdoors.

The next section, about other rooms and contents, reviews methods to prevent beds, furnishings, rugs, carpeting, shelves, and home office machines from becoming contaminant sources. Valuable information is also provided regarding smoke and harmful gases, heating and cooling systems, pet-dander management, control of pest infestations, and renovation and construction.

The chapter "Everyday Cleaning" provides recommendations on the use of vacuums with high-efficiency particulate air (HEPA) filters, air purifiers, avoiding irritating cleaning products, and how to minimize aerosolization by using damp wiping and cleaning wipes instead of spray cleaners.

The chapter "Testing" briefly discusses testing for carbon monoxide, formaldehyde, radon, and volatile organic compounds. As in the other chapters, there are lists of resources, organizations, and products.

This book is for a lay audience, and the language and style sometimes seems alarmist. There are nontechnical uses of terms throughout. Jeff May is a self-described environmentally sensitive individual, which may have contributed to his occasional use of hyperbole (eg, "nightmarish mold") and his liberal use of exclamation points. He also appears at times to support certain controversial recommendations, such as requiring a fragrance-free workplace and telling us not to live in a home with a finished basement. So, some of the book's recommendations, as with any health-care practitioner, should be considered in the light of a second opinion.

Examples of some of the book's best advice include: a simple paper towel method for determining whether a given surface is the source of a problem odor; using a box fan in a window to establish negative pressure in a room to locate problem odors; tips on how to respond to a flood in the house; and minimizing the use of plug-in air fresheners. Because many of the tips on reducing contaminants rely on various cleaning measures, this book's recommendations sometimes blur the usefully hygienic and the simply esthetic, so at times I thought I was reading "Hints from Heloise."

Nevertheless, the book covers a wide range of subjects in an easy-to-understand fashion. As an indoor-air-quality investigator, I was familiar with many of the problems presented in the book, but there were also tips and information new and valuable to me, including an apparently rising inci-

dence of shrew infestation in certain dwellings. The Mays are in the Boston area; I have not heard of shrew infestation in the Pacific Northwest, where I live and work. Overall the Mays do a good job of not making only region-specific recommendations, and they remember to provide advice that can be applied to building environments outside of their own climate, such as in the South, where air conditioning is common.

In summary, I recommend this book as an easily readable collection of useful tips to optimize indoor air quality in the home. Based primarily on Jeff May's career experience, most of the recommendations appear to be quite practical. However, one should consider some of the book's opinions with caution, as the information doesn't always come from peer-reviewed publications.

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**Clinical Tuberculosis**, 4th edition. Peter DO Davies MA DM FRCP, Peter F Barnes MD, Stephen B Gordon MA MD FRCP DTMetH, editors. London: Hodder Arnold/Oxford University Press. 2008. Hard cover, illustrated, 576 pages, \$198.50.

When the first edition of **Clinical Tuberculosis** was published in 1994, the resurgence of tuberculosis (TB) in the western world was drawing increased attention from pulmonologists and infectious-disease specialists. Since then we have achieved more insight into the pathogenesis and treatment of mycobacterial disease. TB diagnosis and treatment has progressed, and the 4th edition of **Clinical Tuberculosis** is a valuable new reference for the TB clinician. It reviews in detail the basic tenets of mycobacterial disease, diagnosis, and treatment, including new approaches to diagnosis and therapy not covered in previous editions.

The book is divided into 7 major sections, and I will expound on each below. I will put extra emphasis on those chapters new to this edition. These 7 sections frame a logical approach to division of TB pathophysiology. They separate history, epidemiology, diagnostics, and treatment in a thoughtful way. Each chapter ends with a set of summary points. The chapters on di-

agnosis and treatment include case vignettes. In general, the figures are clear and concise, the tables are thorough and logical, and there is a subject index.

The first section focuses on the history and epidemiology of TB. The history section discusses the first evidence of TB, in human remains from North Africa, the Mediterranean region, and northern Europe. There is an excellent review of TB's origins and spread, from Egypt, around 4500 BC, through the advent of sanatoriums in the late 19th century. I found this section enjoyable to read and full of interesting historical data not commonly found in a medical text. The first section ends with a chapter on TB epidemiology, which focuses on trends in mortality, drug resistance, and efficacy of the DOTS (directly observed treatment, short-course) strategy.

The next section, which addresses TB pathology and immunology, has an abundance of new material on diagnostics. The first chapter in this section gives an overview of TB genotyping methods and transmission dynamics, and reviews the benefits and limits of restriction fragment length polymorphism analysis, spacer oligonucleotide typing, and VNTR/MIRU (variable number of tandem repeats/mycobacterial interspersed repetitive units) analysis. New insights from those genotyping methods in transmission dynamics, laboratory cross-contamination, and contact investigation are also discussed. The summary table of the tests in this section has become a useful reference in my clinical practice.

In the following chapters the focus shifts to the mycobacteria organism. There is a review of the pathways and genetics of resistance to anti-TB drugs, including the mechanisms of resistance to first-line and second-line agents. The advantages and limitations of sputum-culture-based diagnosis are also reviewed. Extra attention is given to sputum induction and fiberoptic bronchoscopy and their utility in diagnosis. A discussion of nucleic-acid amplifications in both pulmonary and extrapulmonary TB follows, and the chapter finishes with a brief review of rapid detection methods for drug resistance, including molecular beacons and phage amplification.

A new chapter on immunodiagnostic tests covers, in depth, the interferon gamma release assays and their utility in diagnosis of latent TB infection and active TB disease. The review of the ELISpot (enzyme-linked immunosorbent spot) and T-spot assays dis-

cusses the use of each in healthy adults, children, and immunosuppressed patients. An excellent table reviews many of the major interferon gamma release assay (IGRA) studies and addresses the sensitivities, specificities, and key limitations of each interferon gamma release assay. The chapter concludes with a brief mention of newer, more sensitive, immunodiagnostic tests in the development pipeline, and their possible roles in clinical care.

The second new chapter, on the human immune response to *Mycobacterium tuberculosis* infection, explores the innate and adaptive immune responses and the immune coordination in response to infection. Separate focus is given to regulatory mechanisms in host defense, humoral, and cell-mediated immunity. Also reviewed is the role of the *M. tuberculosis* strain on the human immune response. Immunogenomics are explored, though the discussion of genetic variation in susceptibility is brief. The chapter ends with a summary of host/mycobacteria interactions, and the host factors that influence effective vaccine development. Given the increase in tuberculosis immunology research publications over recent years, this chapter will grow in future editions.

The following section discusses clinical aspects of TB. A chapter on respiratory TB discusses the clinical features of primary and post-primary infections. There is a thorough discussion of complications following TB infection. The differential diagnosis of pulmonary TB is also discussed. A chapter on nonrespiratory TB reviews the clinical presentation, relative incidence, diagnosis, and treatment of TB of lymph nodes, bone, joints, gastrointestinal system, skin, and central nervous system, and miliary and rare forms of extrapulmonary TB.

The next major section of the book delves into TB treatment and the pharmacology of the first-line and second-line TB medications, including drugs in development. For each drug reviewed, pharmacokinetics, dosing, adverse effects, and drug interactions are addressed. I also find this chapter useful in practice, though a comprehensive table of drugs, dosing, clearance, and interactions is lacking.

The third new chapter in this edition calls for the development of new TB drugs to combat increasing drug resistance and reviews drugs that are in development and clinical trials. The fluoroquinolones, in addition to many of the mycobacterial drugs