Why read this book? Because “increasing numbers of chemical disasters, threats of chemical warfare, and new chemicals with neuro-toxicities” threaten us each year, and this paperback consists of clinically relevant and exceptionally well-written information. The author is a VA clinician and assistant professor at the Medical College of Virginia, who illustrates epidemiological history with case reports from around the world in a very readable 300-page volume. The work is organized into sections on military, terrorist, and disaster incidents, pesticides, metals, solvents, toxic gases, and other chemicals and syndromes. Each chapter begins with a narrative of what happened to whom, where, and how did it end. (Epidemiology, cleverly disguised as a short story, is explained by astute physician-observers throughout the years, by what is now called case series.) In each chapter, this story is followed by a brief discussion of clinical signs and symptoms, both physical and psychiatric, then diagnosis and treatment. Comprehensive references append each discussion.

The major toxic metals include aluminum, arsenic, lead, manganese, mercury, thallium and tin. The text addresses the concern about aluminum and neurofibrillary tangles, to resolve the ‘cans or bottles’ controversy. The discussion on lead toxicity will be old news to HGTV-watchers and home-remodelers, but others will learn a useful lesson. The mercury chapter examines the case of the dental amalgam. Multiple solvents are discussed, especially the gasoline that fuels the American love affair with the automobile. We’re cautioned to think of solvent toxicity not just when faced with an aromatic patient in obvious delirium. Literally hundreds of millions of tons of just one solvent are produced each year and millions of workers are at risk for potential exposure daily. Common symptoms include depression, anxiety, and insomnia in addition to memory loss. The two most important toxic gases are carbon monoxide and hydrogen sulfide, one odorless, the other noxious. If they are not fatal, they can still cause depression and anxiety. After reading a few chapters of this book, I wondered how many cases I’ve missed over the years.

The final ‘other chemicals’ section covers PCBs, miscellaneous elements, and chemical sensitivity syndromes. This latter, very gray area is ripe for further study and the author gives hundreds of references to guide the reader’s exploration. Only minor space limitations detract, i.e., the chapter on fumigants is a short three pages.

This book is essential for the military physician’s bookshelf; whether a family practitioner, internist, psychiatrist, or ‘occ doc.’ It was actually fun to read.

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