studies of persons working with substances or processes considered carcinogenic to humans, including arsenic and compounds, vinyl chloride, boot and shoe manufacture or repair, iron or steel foundry work, the rubber industry, or working as a painter, show only limited or a low level of any evidence for teratogenic effects.

The following two chapters cover the Soviet and Chinese literature on the subject. However, the epidemiological studies referenced often were too small to afford definite conclusions. In addition, the discussion for specific compounds often did not differentiate very clearly between animal and human studies.

A fourth chapter by a Bulgarian author affords a balanced yet critical review of the data on adverse effects of chemicals on human pregnancy. A section on male reproductive toxicology has chapters on animal studies with cyclophosphamide, animal and human results with chromium, monitoring spermatogenesis, and one on a survey of offspring of testicular cancer patients who had been treated with a combination of chemotherapeutic agents, including cisplatin. Unfortunately, the number of cases was too small for a definite conclusion, but the results were suggestive of male germ cell injury in the genesis of some childhood malignancies.

The section on female reproductive toxicology has a chapter on the adverse effects of pesticides on pregnancy outcomes, including low birth weight and pregnancy loss, in female greenhouse workers in the Ukraine. A chapter from a German author discusses the effects of pesticides and heavy metals in decreasing fertility, with possible therapeutic intervention. The final section on human health effects covers varied topics, from testing for reproductive toxicity, with comparisons of regulations in different countries, to risk assessment, epidemiological research, occupations with possible hazards, and a chapter on the toxicity of khat, a substance of abuse in Eastern Africa and the Arabian Peninsula.

There is a final chapter on the toxicity of aluminum, which, although showing some effects in animals at high doses, has little apparent effect in humans at the usual exposure levels. The editorial epilogue attempts to summarize the conclusions from the various chapters.

The value of the book rests in the contributions from specific countries with the reports of the experience in these areas, as well as the literature citations pertaining to them. There is an appreciable degree of overlap in some of the chapters. Moreover, the editorial work was extremely lax; more attention to this aspect of the process would have provided a better product. Lacking also were any papers by authors from the Americas, Japan, or Australia. For a balanced presentation, some representatives from these areas of the world should have been included.

ELIZABETH K. WEISBURGER

Taking an Exposure History (Case Studies in Environmental Medicine, No. 26), Agency for Toxic Substances and Disease Registry (ATSDR), US Department of Health and Human Services, Atlanta, GA, USA, October 1992, 56 pp., no charge

Although this booklet in the series was oriented primarily to primary care providers' knowledge of hazardous substances in the environment, it is significant to

anyone who is concerned with human effects in chemical health and safety. Many environment-related diseases either manifest themselves as common medical problems, or have non-specific symptoms. Hence, an exposure history of the individual is very important. The primary care clinician can play an important role in detecting, treating, and preventing diseases due to toxic exposures by obtaining a thorough exposure history.

As in previous issues in this series, a case study is presented in which a 52-year-old man with previously diagnosed coronary artery disease controlled by nitroglycerine describes episodes of recurring headache for the past three weeks. Mild nausea often accompanies the headache: there is no vomiting, but a dull frontal ache not relieved by aspirin. To further illustrate the diagnostic effort, the booklet presents three scenarios: (1) an accountant who has had the same job and residence for many years; (2) the owner of a commercial cleaning service who uses cleaning products at various industrial sites; and (3) a retired advertising copywriter who lives in the vicinity of an abandoned industrial complex. Most people with illness caused or exacerbated by exposure to hazardous substances obtain their medical care from clinicians who are not specialists in either environmental or occupational medicine. For example, in a study of a primary care practice in an academic setting, only 24% of 625 charts had any mention of the patient's occupation, and only 2% had information on exposures, duration of present employment, and past occupations. This could be of great significance now that many persons are changing jobs.

Organ systems often affected by toxic exposure are neatly itemized, while toxicants in the home environment are noted, including indoor air pollution, tobacco smoke, wooden stoves, gas ranges, building materials, asbestos, and radon, by common household products (under-the-sink), pesticides, and lawn care products, lead products and waste, by recreational hazards, water supply, soil contamination and others. By utilizing the exposure history form, the components of an exposure history can be developed. Each of the three scenarios mentioned previously were studied, with exposures going back 30 years as highly significant. Further assistance on taking patient history and its significance can be obtained from the ATSDR, Division of Health Education, Office of the Director, at (+1−404) 639 6204, together with the numerous references given in the booklet. This is a very practical and useful guide to occupational as well as environmental exposures in the world.

HOWARD H. FAWCETT

Current Environmental Engineering Summaries — 1993 edition, Engineering Information, Inc., Government Institutes, Inc., Rockwell, MD, USA, ISBN 0-86587-346-1, 1993, 1110 pp., US$ 89

According to its compiler, this book: "is an organized compilation of bibliographic citations and abstracts covering the world's technologic literature on environmental engineering. The literature covered is found in published journals, technical reports, conference proceedings and other material. Two types of conference records are