

Arsenic in the Environment – Part II: Human Health and Ecosystem Effects, J.O. Nraigu, ed., Wiley, New York, NY, 1994, \$95.00, 243 pp., ISBN: 0-471-57929-7

The first volume in this series (Part I) focussed on the sources, distribution, biotransformation, speciation, and fate of arsenic in soils and the aquatic environment. Part II (this volume) covers the human health and ecosystem effects of arsenic. The first chapter discusses Arsenic in Human Medicine (source of exposure, history of arsenic poisoning, clinical manifestation, and diagnosis and treatment). The second chapter discusses Health Effects of Environmental Arsenic (respiratory, gastrointestinal, dermatological, etc.).

Other chapters are:

3. Toxicity and Metabolism of Inorganic and Methylated Arsenicals
4. Toxicity and Metabolism of Arsenic in Vertebrates
5. Chronic Arsenic Poisoning in Humans: the Case of Mexico
6. Human Carcinogenicity and Atherogenicity Induced by Chronic Exposure to Inorganic Arsenic
7. Effects of Arsenic on DNA Synthesis in Human Lymphocytes
8. Induction of Lung-Specific DNA Damage by Methylarsenics via the Production of Free Radicals
9. Chronic Arsenism from Drinking Water in Some Areas of Xinjiang, China
10. Estimation of Human Exposure to and Uptake of Arsenic Found in Drinking Water
11. A Review of Arsenic Hazards to Plants and Animals with Emphasis on Fishery and Wildlife Resources
12. Arsenic in Marine Organisms: Chemical Forms and Toxicological Aspects.

I was interested in the chapter on chronic arsenic poisoning in China. The report was somewhat disturbing because of the large number of claims of poisoning found as a result of drinking naturally contaminated water. By plotting the incidence of diagnosed cases of poisoning versus concentration, the investigators developed an equation:

$$\log(y + 2) = 2/2464x + 0.00953$$

which (I assume, because they do not tell you what x and y are) relates the incidence of poisoning to the water concentration. But the plot of the data nicely shows that approximately 0.2 mg/l is the safe arsenic level.

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Biohazards Management Handbook, 2nd Edition, D.F. Liberman, ed., Marcel Dekker, New York, NY, \$175.00, 1995, 461 pp., ISBN: 0-8247-8995-4

This book is the 26th in Dekker's series of books dealing with Occupational Safety and Health. It is a revised and expanded version of the 17th book (of the same title) in the series.