

BOOK REVIEW

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Review of: *Drug Abuse Handbook, 2d ed.*

REFERENCE: Karch SB, editor. Drug abuse handbook, 2d ed. Boca Raton, FL: CRC Press, Taylor and Francis Group, 2007; 1267 pp.

The second edition of the Drug Abuse Handbook by Steven Karch is a well organized, comprehensive, and thorough review of all aspects of drug abuse. Chapters include the pathology of drug abuse, pharmacokinetics, pharmacology, neurochemistry, addiction medicine, workplace, and sports drug testing, postmortem toxicology, and toxicogenetics. This text is therefore very relevant for professionals working in forensic medicine, toxicology, criminalistics, and psychology. Few texts cover aspects of scheduling, forensic analysis, and clandestine manufacture in such detail and none offer these subjects in conjunction with aspects of forensic medicine and toxicology. While the book is excellent overall, some highlights include a chapter on drug law by Drs. Alan Jones and Barry Logan that discuss and put into perspective defense arguments against charges of driving under the influence. The book also includes a detailed discussion of legal questions relating to drug abuse including case reports and legal opinion making it of interest to attorneys and paralegals. A chapter describes the symptoms and treatment of drug addiction and is followed by a discussion of the medical complications of drug abuse. The latter describes mental status, seizures, stroke, and cardiac care making this an excellent resource for emergency room physicians and associated staff.

The list of around 90 contributing authors reads like a Who's Who of forensic drug chemistry, medicine, law, and toxicology and provides a wealth of current information on all aspects of drug

abuse. The material has been revised considerably from the first edition and in particular includes chapters covering areas of growing interest that address, for example, the influence of genetic factors on pharmacokinetics and disease. Chapters covering new developments in DNA research, genetic performance enhancement, and neurochemistry are also new to this edition. The section on sports medicine not only covers the traditional list of compounds banned by the Olympic Committee, but also discusses the latest techniques for the detection of more difficult analytes such as erythropoietin, human growth hormone, and future trends in athletic doping. A chapter on workplace drug testing provides an overview of the mandatory guidelines for federal workplace drug testing programs including the Department of Transportation, the nuclear power industry, as well as programs outside of the United States. The in-depth discussions and easily accessible data, including analytical methods, make this an excellent reference text for those in the field as well as students and faculty in all forensic disciplines dealing with drug abuse. The book is extensively referenced and includes numerous figures illustrating primarily pathological findings. Included are an inspection of the nasal septum, sites of injection, and examination of the heart valves. Numerous slides showing the microscopy of tissue sections and changes associated with exposure to drugs of abuse are also presented. My only criticism is that the photographs are in black and white whereas color would add to the presentation. This however does not detract from the fact that the Handbook of Drug Abuse is the definitive text on the subject of drug abuse and a must for everyone associated with this field.

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