

## Book Review

### *Disposition of Toxic Drugs and Chemicals in Man, 11th ed*

R. C. Baselt

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The 11th edition of Randall Baselt's monographs of drugs and chemicals is indeed worth adding to anyone's library. It is true that the font has gotten much smaller and the paper stock is thinner; however, the information is exponentially greater.

The "Baselt book" has evolved into the most comprehensive resource for information regarding the identity, chemistry, dose, exposure, mechanism, biotransformation, as well as body fluid and tissue concentrations of chemical compounds used for drug therapy or those where exposure is of interest for interpretation of effects in humans. The descriptive title of the book is exactly what can be comprehensively found within. The author has provided thorough, up-to-date information and data gleaned from worldwide references relating to drugs and chemicals that are reported to have potential or documented deleterious effects. Whether the effects are adverse reactions and toxicity from drugs, or results of exposure to known toxic chemicals in the environment or workplace, you will likely find very useful information in any one of the monographs.

Each monograph extensively identifies the agent and its use. It also provides a great deal of information relating to blood, plasma, and serum concentrations resulting from various routes of exposure and dose. For drugs, the pharmacological classification typically based on mechanism of action is provided. For chemicals, the economic use and/or typical type of exposure is provided. For each entity there is a section on metabolism that details extent of metabolism, metabolic products, and pharmacogenomics information regarding phenotypic characteristics. Ratios and distribution of parent chemical versus metabolite as well as the activity of metabolites are frequently provided. Metabolism is followed by a section on toxicity that provides extensive referenced information regarding typical adverse effects and toxicity associated with reported body fluid and tissue concentrations. Averages and ranges of blood concentrations associated with reported illicit use and overdoses resulting in recovery with therapy

as well as those leading to death are provided. Typically used analytical methods of testing for the presence of the drug or chemical are included. An important feature in this section is the extensive postmortem information that includes reports and references to postmortem changes in blood concentrations that can occur. It must be noted that all of the information provided in the monographs is referenced and the source is included as part of the monograph.

The 11th edition has been expanded to include 275 new entries for a total of about 1,800 drugs and chemicals that an individual could be exposed to and experience toxicity. Like the 10th edition, it continues to provide indexed drug categories and chemical categories. This edition has expanded those to include many new psychoactive substances (NPS) of current interest such as fentanyl, etc. An added index provides CAS numbers, a valuable source for cross-referencing and locating chemical entities. The new edition also has added a list of abbreviations. The guidelines for interpretation of analytical results have been updated and expanded in the postmortem toxicology area.

This reviewer has been using earlier editions of this book for many years and has found it to be an invaluable resource, particularly for interpretation of postmortem forensic cases. I have made references to the book in classes that I have taught in forensic, clinical, and environmental toxicology as well as using the information within for lecture preparation. I actually found my copy of the 4<sup>th</sup> edition on a "way up top" bookshelf. Flipping through the dog-eared pages really made me appreciate this latest edition. Through the years I have continued to use each newly published edition and was particularly pleased with each expansion as it faithfully includes new drugs and stays up to date with illicitly used chemicals.

In a recent discussion of the new edition, a colleague related to me that blood concentrations of a drug were just published in a peer-reviewed journal and Dr. Baselt had literally contacted the author shortly afterward to discuss the new data. An addendum to the text actually includes a number of entries that were added after the book had already been submitted for publication.

In conclusion, this 11th edition definitely meets my high expectations as a reference and will provide many different forensic practitioners with invaluable information for the interpretation of exposures to drugs and chemicals. And, of course, the sources referenced certainly will provide the background information for anyone needing to "mine" additional details.