## **BOOK REVIEW**

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## Review of: Handbook of Forensic Pathology, 2nd edition

REFERENCE: DiMaio VJM, Dana SE. Handbook of forensic pathology, 2nd ed. Boca Raton, FL and New York City, NY: CRC, Taylor and Francis, 2007; 298 pp.

Handbook of Forensic Pathology is an overview of the basic principles of forensic pathology written in an expanded outline format. It is a concise quick reference source that appears to be designed primarily for those requiring a background in forensic pathology, such as medical students, residents, fellows, medicolegal death investigators, law enforcement, and attorneys.

The first edition of this handbook was published in 1998 (1). It was small enough to fit in a lab coat pocket like other quick reference handbooks carried by medical students and residents. It was also spiral-bound, allowing it to lay flat when opened. The new edition is softbound and somewhat larger, with a larger typeface. It retains the outline format and, like the first edition, is adequately indexed. New to this edition is a section in the center of the book containing 21 exceptionally well-reproduced color photographs and photomicrographs.

The chapters of the handbook are: Introduction to medicolegal casework, Physical evidence, Time of death–Decomposition, Identification of remains, Natural disease, Blunt force injury, Wounds produced by pointed, sharp-edged, and chopping implements, Gunshot wounds, Asphyxia, Deaths during police custody: Excited delirium syndrome, Murder of infants and children, Sexually related homicides, Fire and thermal injuries, Transportation deaths, Environmental deaths, Electrocution, Deaths in nursing homes, Deaths due to starvation, Deaths in association with pregnancy, Intraoperative deaths, and Forensic toxicology.

Overall, the content of the handbook remains unchanged when compared with its predecessor. Most of the chapters were taken almost verbatim from the first edition. There are a few updated statistics, figures, and references.

The more significant updates in the second edition are listed below:

- The segment on DNA analysis in the chapter on physical evidence has been updated to reflect current technology. The obsolete topics of restriction fragment length polymorphisms and variable number of tandem repeats have been removed and replaced with an updated section on short tandem repeats and a very general discussion about mitochondrial DNA analysis.
- 2. The chapter on blunt force injury adds a brief statement about beta-amyloid precursor protein and diffuse axonal injury.

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- 3. The chapter on gunshot wounds has an additional 2-page discussion of gunshot residue analysis of hands and clothing.
- 4. The toxicology chapter has an added section on phencyclidine. Like the first edition, this chapter concludes with tables listing therapeutic, toxic, and fatal concentrations of drugs and chemicals/compounds, and the new edition has a few additional entries in these tables.
- There is a new 2-page chapter on deaths in nursing homes, covering neglect and deaths associated with hospital bedside rails and medical restraints.
- 6. By far the largest change in this edition is the new chapter entitled "Deaths during police custody: Excited delirium syndrome." It discusses the excited delirium syndrome and its associated physiology, hogtying and choke holds, restraint asphyxia, tasers, pepper spray, and deaths occurring in jails. The content of the chapter is similar in scope, although very much condensed, to another book (2) cowritten by one of the authors of the handbook.

The handbook provides an abundance of information in an easily accessible format. It is a convenient quick reference source containing many tables of useful information such as arcing distances for various electrical voltages, scalding times for various water temperatures, and timeframes of microscopic organization of subdural hematomas, to name just a few. The volume will be useful not only for quick reference but also for forensic pathology fellows preparing for their board examinations.

It must be kept in mind, however, that some of the information described in the handbook is provincial. Certain practices differ between jurisdictions due to local laws or customs. For example, not all forensic pathologists directly mark or inscribe bullets recovered from bodies; they may instead take photographs for documentation. Another example is the authors' description of "unclassified" and "therapeutic misadventure" as manners of death, which are not available as manner classifications in many states.

The handbook also lacks consistency in its writing style. Some chapters exhibit an objective, scientific, academic style which flows well. Other chapters are written in a more informal, subjective, conversational style. For example, some chapters use phrases such as "when you [do something]..." and deviate from the concise outline format by using longer narrative paragraphs which occasionally appear to represent personal opinion.

In addition, some chapters are adequately referenced whereas others are not. Some chapters describe certain findings in a very precise percentage of cases (for example, 21%), without a reference. It is also unclear to the reader in other instances whether approximations of percentages, statistics, or even other general statements are based on published literature or personal experience.

Finally, while both sides of certain controversial topics in forensic pathology are generally presented, opinions differing from those of the authors are quickly dismissed, making the discussion appear unbalanced. While there is insufficient space in a handbook to exhaustively review all the available literature, some of the more controversial topics are too quickly glanced over, making the authors' opinions appear somewhat dogmatic.

In conclusion, the second edition of Handbook of Forensic Pathology will be a useful quick reference source, although it is

not substantially different from the first edition and it suffers from a few issues relating to style, source referencing, and author bias.

## References

- 1. DiMaio VJM, Dana SE. *Handbook of forensic pathology*. Austin, TX: Landes Bioscience, 1998.
- 2. DiMaio TC, DiMaio VJM. *Excited delirium syndrome*. Boca Raton, FL: CRC Press, 2006.